



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

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AUTO SAFETY HOTLINE  
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**DYNAMIC SCIENCE, INC.**  
In-Depth Accident Investigation

Contract DTNH22-94-D-27058  
Case DSI-94-AB-022

 1995



## TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.  
CONTRACT NUMBER: DTNH22-94-D-27058  
CASE NUMBER: Case DSI-94-AB-022

[REDACTED]

This fatal collision occurred during a winter afternoon [REDACTED] 94 @ 1454) in [REDACTED] California. It was clear and the asphalt roadway was dry and free of defects.

Vehicle 1, a 1992 Chevrolet Corsica driven by a 73 year old female, was travelling at an estimated speed of 45 MPH westbound on a four-lane divided roadway approaching a three-leg intersection. Vehicle 2, a 1990 Mitsubishi Eclipse driven by a 49 year old female, was stopped at the intersection, facing south. After stopping for several seconds while waiting for traffic to clear, the driver of Vehicle 2 pulled into the intersection. The driver of Vehicle 1 saw Vehicle 2 enter the intersection, she braked and steered her vehicle to the left. The front of Vehicle 1 struck the left side of Vehicle 2 in an angle configuration. The airbag in Vehicle 1 deployed at this point. Vehicle 2 was pushed into a counterclockwise direction and came to rest next to Vehicle 1, facing east.

The driver of Vehicle 1 was in full arrest post-collision. She was transported by ambulance with no pulse or respiration. She expired at 1553 hours, less than an hour after the collision. She sustained a laceration of the heart and ascending aorta, a contusion to the pectoralis muscle on the anterior chest wall, a contusion to the epicardium and intraventricular septum, as well as several abrasions to the face, neck, and extremities. The stated cause of death was massive intrathoracic hemorrhage. The fatal injuries were of a compressive-rupture nature and were caused by the driver's proximity to the airbag module during deployment. The driver of Vehicle 2 complained of pain to her right hip.

Both vehicles were towed from the scene due to damage.

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*The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.*

*The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.*

*Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.*

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**DYNAMIC SCIENCE, INC.**  
**ACCIDENT INVESTIGATION**  
**CASE NUMBER: DSI-94-AB-022**

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**ACCIDENT DATA:**

**Location:** [REDACTED], California  
**Area/Type:** Urban  
**Date/Time:** Winter / Afternoon  
**Accident Type:** Car/Car, front to left side

**Injury Severity:**

**Vehicle 1:** Driver, AIS-6

**Vehicle 2:** Driver, complaint of pain

**AMBIENCE:**

**Viewing Conditions:** Daylight  
**Cloud Cover:** Clear  
**Precipitation:** None  
**Road Surface:** Dry

**ROADWAY:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Type:</b>	Arterial divided trafficway	Residential divided trafficway
<b>Number of Lanes:</b>	5	2
<b>Width:</b>	25.3 M (83 ft.)	15.5 M (51 ft.)
<b>Traffic Density:</b>	Light	Light
<b>Median:</b>	Raised, curbed 1.2 meters (3.8 ft)	Raised, curbed 2.4 meters (8 ft)
<b>Edge:</b>	Curbed on North, dirt shoulder on South	Curbed
<b>Surface:</b>	Asphalt	Asphalt
<b>Reported Defects:</b>	None	None
<b>Co-efficient of Friction (est.):</b>	0.70	0.70
<b>Vertical Alignment:</b>	Level	4% down grade
<b>Horizontal Alignment:</b>	Slight curve [R = 1,905 m (6,250 ft)]	Straight

**TRAFFIC CONTROLS:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Signals:</b>	None	None
<b>Signs:</b>	None applicable	Stop Sign
<b>Speed Limit:</b>	80 KPH (50 MPH)	40 KPH (25 MPH)
<b>Markings:</b>	Dashed, white lines to left turn lane	None

**VEHICLES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Description:</b>	1992 Chevrolet Corsica four-door sedan	1990 Mitsubishi Eclipse two-door coupe
<b>Odometer:</b>	15,901 km (9,881 mi.)	Unknown, not inspected
<b>Engine:</b>	3.1 L / 4 cyl.	1.8 L / 4 cyl., per V.I.N.
<b>Vehicle Modifications:</b>	None	None
<b>Tire Condition:</b>	Good	Good (photographs)
<b>Manual Restraints:</b>	Lap and shoulder belts front seating positions, and the left and right rear seating positions; lap belt center rear seating positions.	Lap belts, front seating positions, per V.I.N.
<b>Automatic Restraints:</b>	Supplemental Restraint System (driver's side airbag)	Automatic shoulder belts, per V.I.N.
<b>Reported Defects:</b>	None	None
<b>Cargo:</b>	Unknown	Unknown
<b>Windshield Damage:</b>	None	None (photographs)
<b>Fleet:</b>	No	No
<b>Tow Status:</b>	Towed, due to damage	Towed, due to damage

**VEHICLE DAMAGE:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Object Struck:</b>	V2	V1
<b>Event Number:</b>	01	01
<b>CDC:</b>	12FDEW1	09LPEW2 (photographs)
<b>Maximum Crush:</b>	14 cm (5.6 in.)	Zone 2

**VEHICLE VELOCITY ESTIMATES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Impact Speed: (estimated)</b>	35 KPH (22 MPH)	8 KPH (5 MPH)
<b>Total Delta V:</b>	11 KPH (7 MPH)	12 KPH (7 MPH)
<b>Longitudinal Delta V:</b>	-11 KPH (-7 MPH)	-2 KPH (-1 MPH)
<b>Lateral Delta V:</b>	-1 KPH (-1 MPH)	+12 KPH (+7 MPH)
<b>Energy Dissipation:</b>	8136.7 joules (5982.9 ft lbs)	5432.1 joules (3928.4 ft lbs)

The following stiffness values were used during the CRASH run: Vehicle 1 (a = 239.3, b = 61.8), Vehicle 2 (a = 180, b = 67).

**COLLISION SEQUENCE:**

**Pre-Crash:** Vehicle 1 was travelling westbound on a five lane, divided, two way, urban asphalt trafficway at approximately 76 KPH (47 MPH) in the second (median) lane. Vehicle 2 was stopped at stop sign, facing south. The driver of Vehicle 2 had just left her home and was en route to a supermarket. The driver of Vehicle 1 apparently saw Vehicle 2 enter the travel lane; she braked and steered to the left.

**Crash:** The front of Vehicle 1 struck the left side of Vehicle 2 in what amounted to an angle configuration at an EDCRASH computed speed of 35 KPH (22 MPH). Vehicle 1 experienced a Delta V of 11 KPH (7 MPH) and 12 KPH (7 MPH) for Vehicle 2. The Delta V was of sufficient magnitude to deploy the Supplemental Restraint System (SRS), driver's side air bag, in Vehicle 1.

**Post-Crash:** Final rest. Vehicle 1 came to rest partially in its original travel lane and partially in the adjacent lane; it was heading approximately 5 degrees counterclockwise from its pre-crash heading. Vehicle 2 rotated sharply and came to rest facing nearly 90 degrees from its original path of travel.

Driver activities. The driver of Vehicle 1 was sitting in the driver seat and apparently unresponsive. She was removed by ambulance personnel and transported to the hospital where she was pronounced dead on arrival.

The driver of Vehicle 2 was fully alert and aware of her surroundings. She complained of a sore right hip which she attributed to the emergency brake in the center console of her vehicle.

Rescue activities. The driver of Vehicle 1 was removed from the scene by paramedics and transported to a trauma hospital. A chronology of rescue activities is shown in the following table.



Event Time	Event
1454	Collision
1458	Ambulance called
1502	Arrived on scene
1525	Departed from scene
1535	Arrived at hospital
1538	Admitted to hospital
1553	Time of death

Scene clearance. Vehicles 1 and 2 were towed from the scene due to damage.

**Occupant  
Kinematics:**

The driver was sitting directly in front of the steering wheel just prior to the collision. Her seat was adjusted to 6.6 cm (2.6 in.) rearward of the forward most position, putting the bottom of the steering wheel rim roughly even with the forward portion of the seat. According to on-scene witnesses, the driver was wearing her lap and shoulder belt. Prior to the collision the driver had her right foot on the brake and her left on the floorboard. Vehicle 1 had apparently been serviced recently since there was a protective paper floor mat in use at the time of the collision. Post-collision, this mat was torn in a manner which would suggest that the driver's foot had come into contact with it.

The driver recognized the impending collision. She braked with her right foot and steered to the left. The pre-impact braking brought the driver forward and nearly into contact with the steering wheel hub.

At impact, the driver appears to have been twisted slightly to the left. At the time of deployment of the air bag, her upper body may possibly have been in contact with the hub, but more likely a short distance back from it. The driver's left knee contacted the lower instrument panel, resulting in a small abrasion. At deployment the module opened in the designed fashion. The upper flap, after initially contacting her chest, rotated vertically upward as designed and contacted her neck and chin, with slightly more contact to the left side than to the right. The lower flap appears to have been restricted somewhat by the proximity of the driver's

upper torso, with the resulting back pressure cracking both the inner (hard plastic) and outer (soft plastic) covers. There is evidence (a clothing transfer) that indicates the driver came into contact with the exterior of the module cover. The concussive force of the deployment was primarily to the left side of the driver's upper body causing a laceration of the heart and the ascending aorta.

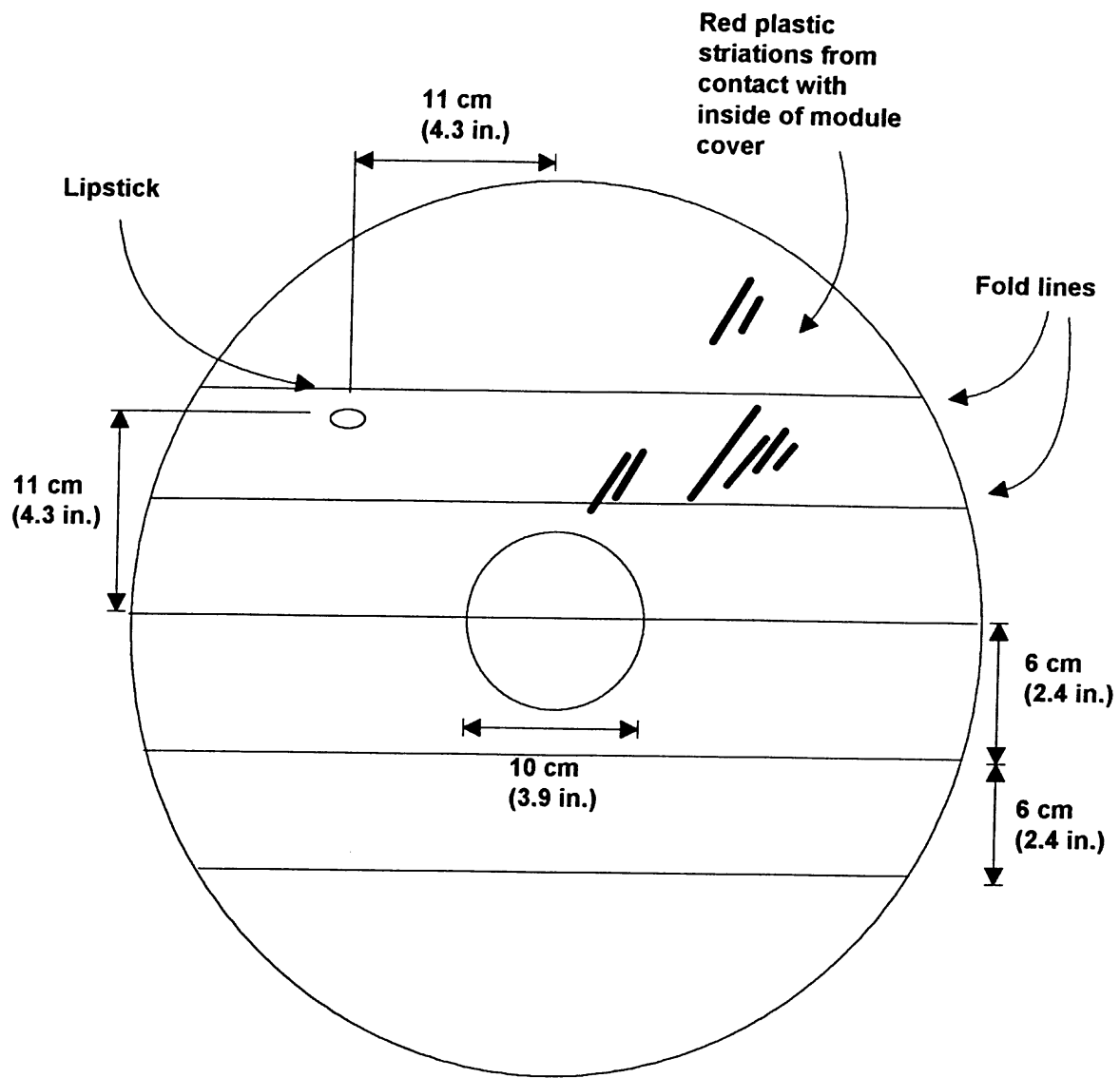
The steering column was displaced approximately 3.8 cm (1.5 in.) forward with complete shear capsule separation as a result of the driver's proximity to the module cover during the initiation of the airbag deployment sequence. The airbag contacted the driver's lips during deployment as noted by the red lipstick transfer on the left upper quadrant of the airbag. There were also abrasions to the left side of the driver's face from contact with the expanding airbag.

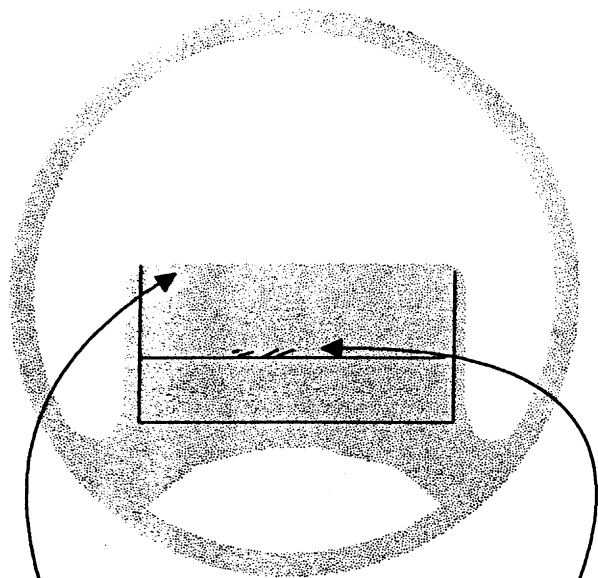
There is a laceration to the dorsal aspect of the left hand. It appears that the driver was holding onto the rim with both hands and the left one gave way. The deceleration forces, either from braking or the impact, were such that her hand swivelled forward presenting the dorsal portion of her hand to the instrument panel. When her fingers could no longer retain her grip her left hand slipped from the steering wheel rim and struck a switch on the upper part of the left instrument panel.

**Supplemental  
Restraint System:**

Vehicle 1 was equipped with a supplement restraint system (driver's side air bag) that deployed as a result of Vehicle 1's frontal impact with the left side of Vehicle 2. The driver's airbag deployed from the module assembly that was contained within the two-spoke steering wheel. The module cover flaps opened in an H-configuration at the designated tear points. The left upper edge of the upper flap broke away as a result of the deployment. There was a cloth transfer on the lower edge of the upper flap. The hard plastic inner liner of the module cover was broken away at the time of inspection. The airbag itself was not damaged. There were red-colored striations in the upper right quadrant of the air bag due to contact with the back side of the module cover. There was a lipstick imprint on the left upper quadrant of the air bag from the driver.

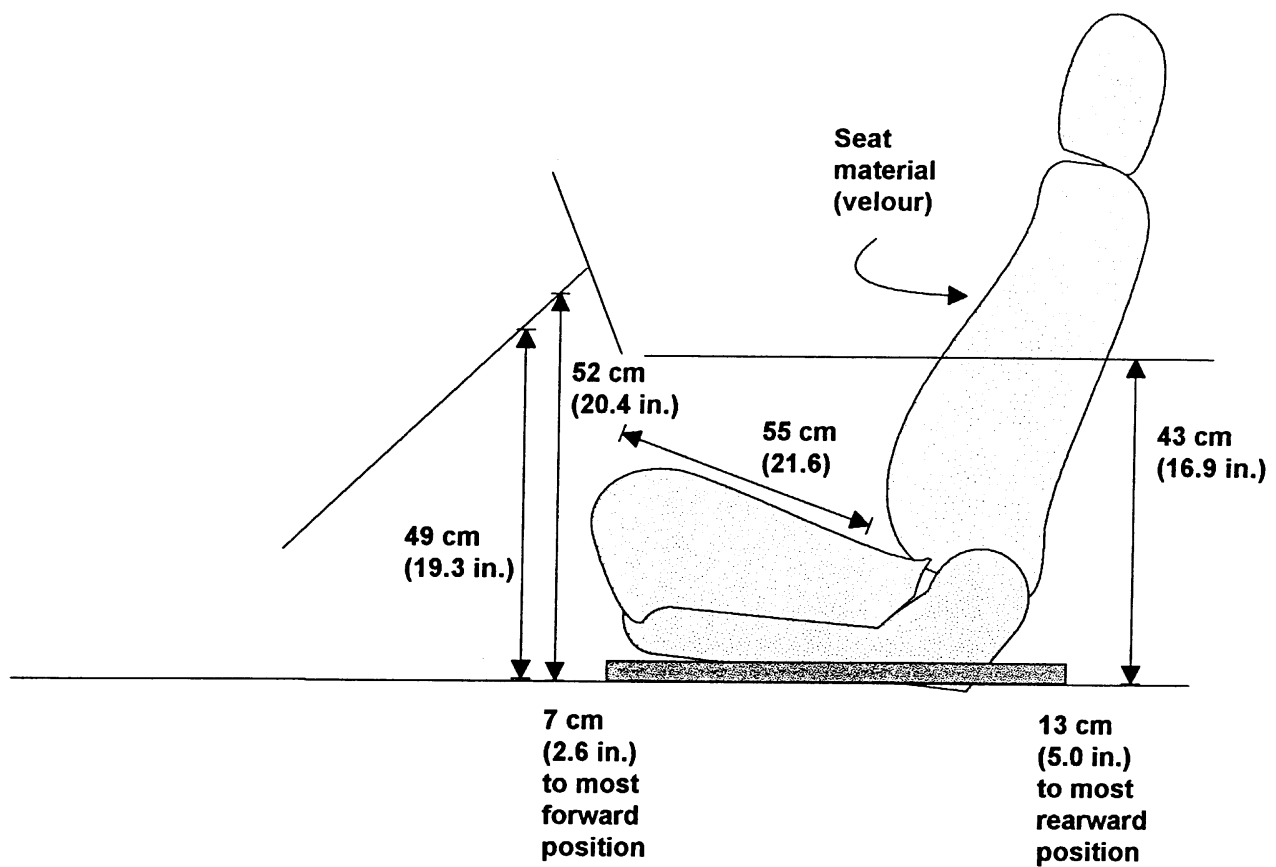
**Safety Standards:** There were no violations of Federal Motor Vehicle Safety Standards and Regulations found during the inspection of Vehicle 1.





**module cover torn away**

**Cloth transfers**



**DRIVER AND OTHER OCCUPANTS:**

**VEHICLE 1**

**DRIVER**

<b>Age/Sex:</b>	73 / Female
<b>Seated Position:</b>	Left front
<b>Seat Type:</b>	Bucket
<b>Height:</b>	150 cm (59 in.)
<b>Weight:</b>	58 kg (128 lbs.)
<b>Occupation:</b>	Retired
<b>Pre-existing Medical Condition:</b>	Severe coronary arteriosclerosis and atherosclerotic cardiovascular disease
<b>Alcohol/Drug Involvement:</b>	None
<b>Driving Experience:</b>	Unknown
<b>Body Posture:</b>	Forward from pre-impact braking and possibly leaning somewhat to the right from the left-hand evasive maneuver.
<b>Hand Position:</b>	Both hands on wheel, clock positions not known
<b>Foot Position:</b>	Left on floorboard, right on brake
<b>Restraint Usage:</b>	Supplemental restraint system (driver's side air bag), manual lap and shoulder belt used
<b>Additional Occupants:</b>	None

**DRIVER AND OTHER OCCUPANTS (con't):**

**VEHICLE 2**

**DRIVER**

<b>Age/Sex:</b>	49 / Female
<b>Seated Position:</b>	Left front
<b>Seat Type:</b>	Bucket with folding back
<b>Height:</b>	160 cm (63 in.)
<b>Weight:</b>	50 kg (110 lbs.)
<b>Occupation:</b>	Unknown
<b>Pre-existing Medical Condition:</b>	Unknown
<b>Alcohol Involvement:</b>	None
<b>Driving Experience:</b>	Unknown
<b>Body Posture:</b>	Unknown
<b>Hand Position:</b>	Unknown
<b>Foot Position:</b>	Unknown, presumed to be on accelerator
<b>Restraint Usage:</b>	Automatic shoulder belt , manual lap belt, both used
<b>Additional Occupants:</b>	None

**INJURIES:****Vehicle 1**

<b><u>INJURY</u></b>	<b><u>OIC CODE</u></b>	<b><u>ICD-9</u></b>	<b><u>SOURCE</u></b>
<b>DRIVER:</b>			
Aorta laceration	420218.6,4	861.03	Airbag module
Heart laceration (multiple)	441016.6,4	861.03	Airbag module
Heart contusion	441002.3,4	861.01	Airbag module
Abrasion, nostril	290202.1,4	910.0	Airbag
Abrasion, left knee	890202.1,2	916.0	Lower instrument panel
Abrasion, left big toe	890202.1,2	917.0	Toe pan
Laceration (2.5 cm), left hand	790600.1,2	882.0	Instrument panel/light switch
Contusion, left hand	790402.1,2	914.0	Instrument panel
Abrasion, left cheek	290202.1,2	910.0	Airbag
Abrasion, left forearm	790202.1,2	913.0	Airbag
Abrasion, chin	290202.1,8	910.0	Module cover
Abrasion, neck	390202.2,5	910.0	Module cover

***Statement of medical consultant regarding the mechanism of injuries:***

"It appears that this victim died rapidly from exsanguination from cardiac and aortic laceration. These injuries were likely of a compressive-rupture nature rather than a laceration from penetrating rib or sternal ends as there were no fractures to either ribs or sternum. The compression sustained by the aorta and heart could have been secondary to loading from the shoulder component of the belt system, the airbag and its casing, or impact with the steering wheel hub, or all the above.

The weight of evidence, I believe, favors a predominant role for the airbag and casing. There is no evidence of seat belt contusion or abrasion of the skin, and the abrasions to the chin and face and nares are suggestive of contact with the airbag casing and expanding airbag, suggesting victim proximity to the detonating airbag complex. It is not possible to



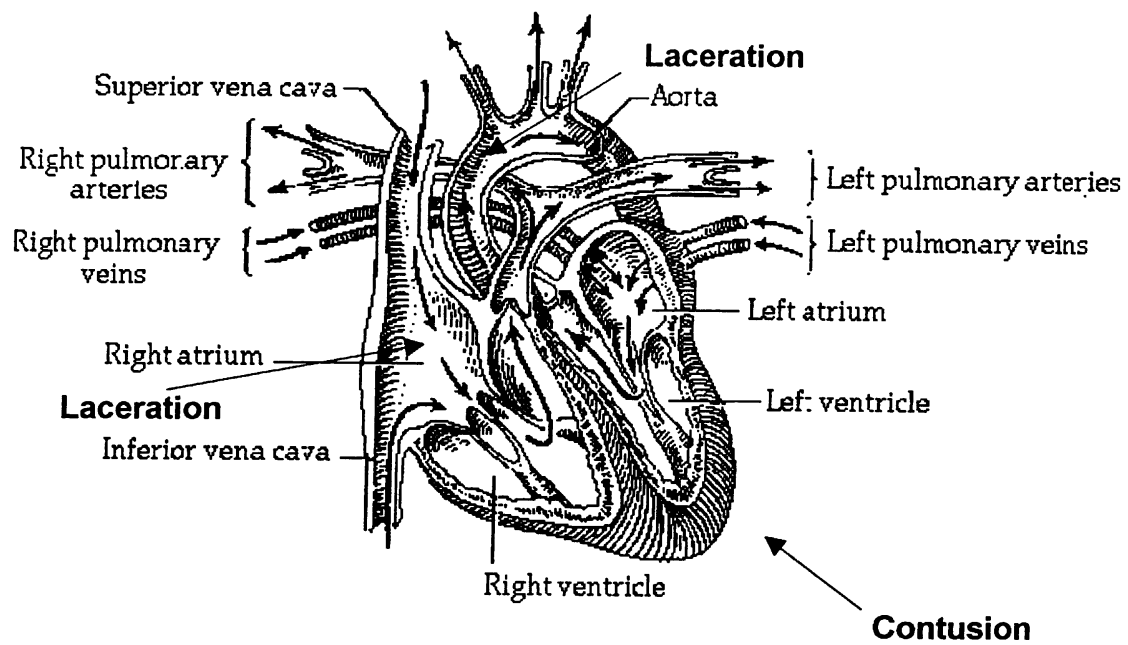
**Case Number: DSI-94-AB-022**

ascertain whether the thoracic injuries were the result of contact with the airbag module cover or the expanding airbag.

It is unlikely that the pacemaker contributed to her injuries, and while her coronary arteries were seen to be partially occluded, this is a normal finding in victims of this age and not likely to make the heart muscle more susceptible to laceration from external compression."

**Vehicle 2**

	<b><u>INJURY</u></b>	<b><u>OIC CODE</u></b>	<b><u>ICD-9</u></b>	<b><u>SOURCE</u></b>
<b>DRIVER:</b>	No reported injuries			



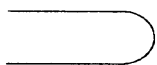
## **Abbreviations Used In Narrative, Scene And Photographic Documentation**

ft	Feet
in	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound

reference  
point  
power  
line pole



Police  
reference  
line



Radius  
of curve  
6250  
feet



Stop  
sign

r  
e  
f  
e  
r  
e  
n  
c  
e

roadway edge  
not curbed

DSI-94-AB-22

Posted Speed Limit: V1 - 64.4 km/h (40 MPH)

V2 - 48.3 km/h (30 MPH)

Roadway Surface type: Paved Bituminous

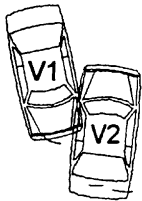
Roadway Grade: V1 level, V2 4 percent down grade



reference  
point  
power  
line pole



Police  
reference  
line



Radius  
of curve  
6250  
feet



Stop  
sign

r  
e  
f  
e  
r  
e  
n  
c  
e

roadway edge  
not curbed

DSI-94-AB-22

Posted Speed Limit: V1 - 64.4 km/h (40 MPH)

V2 - 48.3 km/h (30 MPH)

Roadway Surface type: Paved Bituminous

Roadway Grade: V1 level, V2 4 percent down grade



**COLLISION MEASUREMENTS**  
**Case Number DSI-94-AB-022**

**Reference Point:** RP #1 - Power Line Pole, 0.7 meters (2.3 ft) north of curb edge (reference line) and 19.2 meters (63 ft) east of east curb line. RP #2 - Power line pole, 0.7 meters (2.3 ft) north of curb edge (reference line) and 20.3 meters (66.6 ft) west of west curb edge.

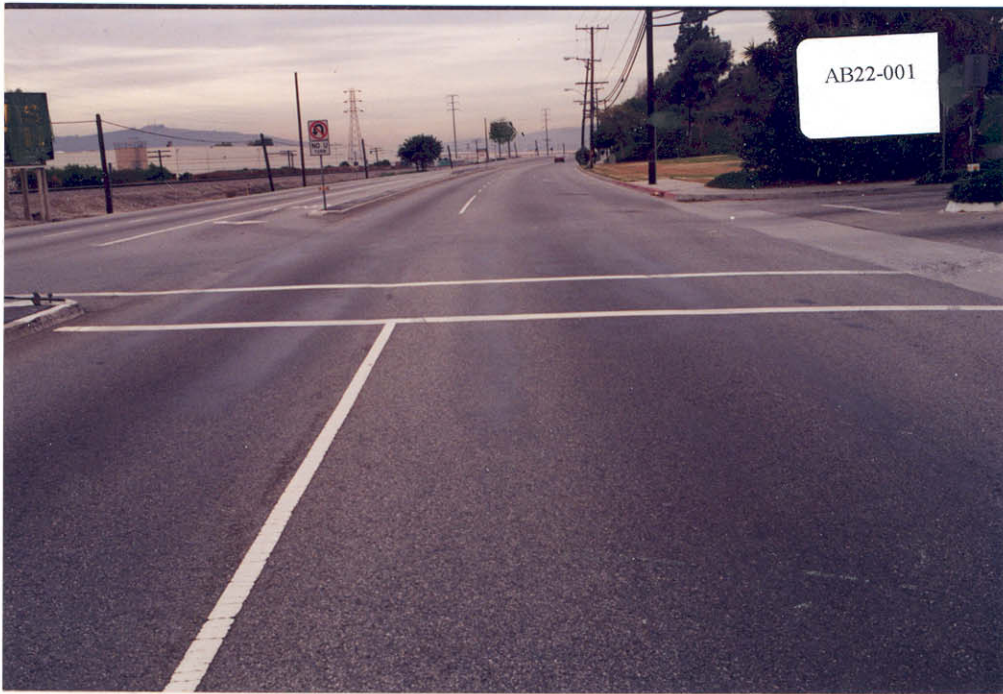
**Reference Line:** North roadway curb edge

DATA POINT	LONGITUDINALS	LATERALS
<b>Westbound lane widths, North to South (RP #1)</b>		
1 (Vehicle 1 travel lane)	0	S 7.22 m (23.7 ft)
2	0	S 10.92 m (35.8 ft)
Center curbed median	0	S 12.12 m (39.6 ft)
3	0	S 15.22 m (49.7 ft)
4	0	S 19.12 m (62.6 ft)
5	0	S 25.32 m (83.1 ft)
<b>Southbound lane widths - West to East (RP #2)</b>		
1 (Vehicle 2 travel lane)	E 26.9 m (88.3 ft)	0
Center curbed median	E 29.3 m (96.3 ft)	0
2	E 35.5 m (117.6 ft)	0
<b>Roadway scrapes - semi U shaped, #3 (RP #1)</b>		
1 - begin	W 31.5 m (103.5 ft)	S 6.4 m (21.0 ft)
1 - end	W 31.6 m ( 103.7 ft)	S 6.9 m ( 22.5 ft)
2 - begin	W 33.2 m ( 108.9 ft)	S 7.9 m (25.9 ft)
2 - end	W 33.2 m (109.4 ft)	S 8.6 m (28.2 ft)
3 - begin	W 33.3 m ( 109.4 ft)	S 8.6 m ( 28.2 ft)
3 - end	W 33.4 m ( 109.6 ft)	S 9.2 m (30.2 ft)
Radius of curve - east/westbound travel lanes = 1,905 m (6,250 ft)	Vehicle 1 grade = level	Vehicle 2 grade = 4% down

## PHOTO / SLIDE INDEX

Case Number DSI-94-AB-022

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1-4	1	West	Approach to area of impact
5	1	West	Impact area
6-7	1	East	Looking back along path of travel
8-11	2	South	Approach to area of impact
12	2	South	Area of impact
13	2	North	Looking back along path of travel
14	NA	---	Reference point
15-30	1	CCW	Vehicle exterior
31-57	1	NA	Vehicle interior. Note: #33 shows possible contact on roof rail, #37 shows cracked module cover, #49-50 show instrument panel separation, #52-53 show shear capsule separation.



















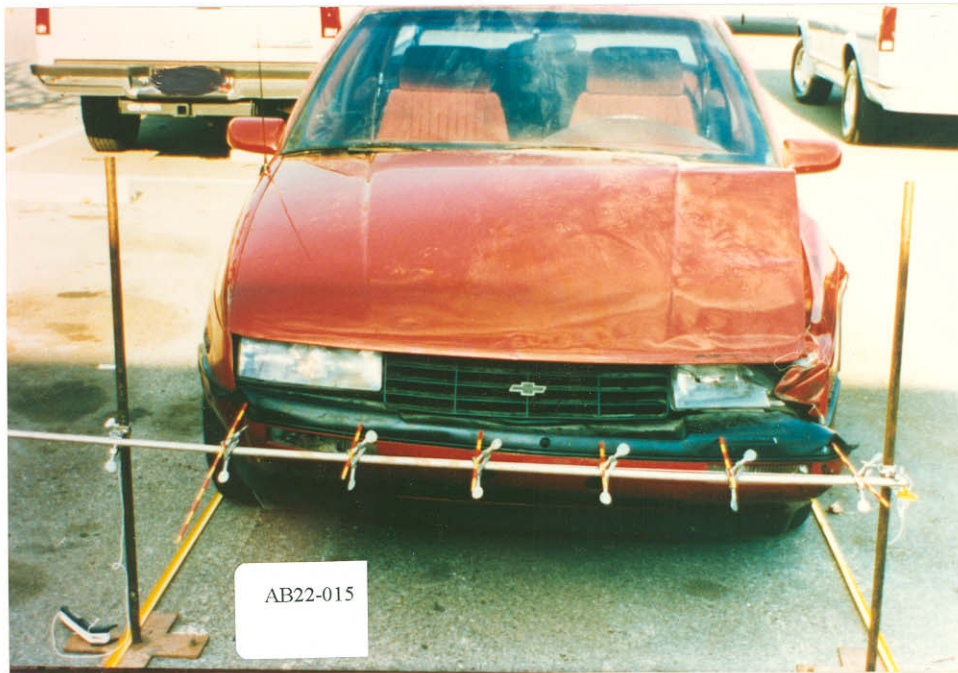


AB22-013



AB22-014







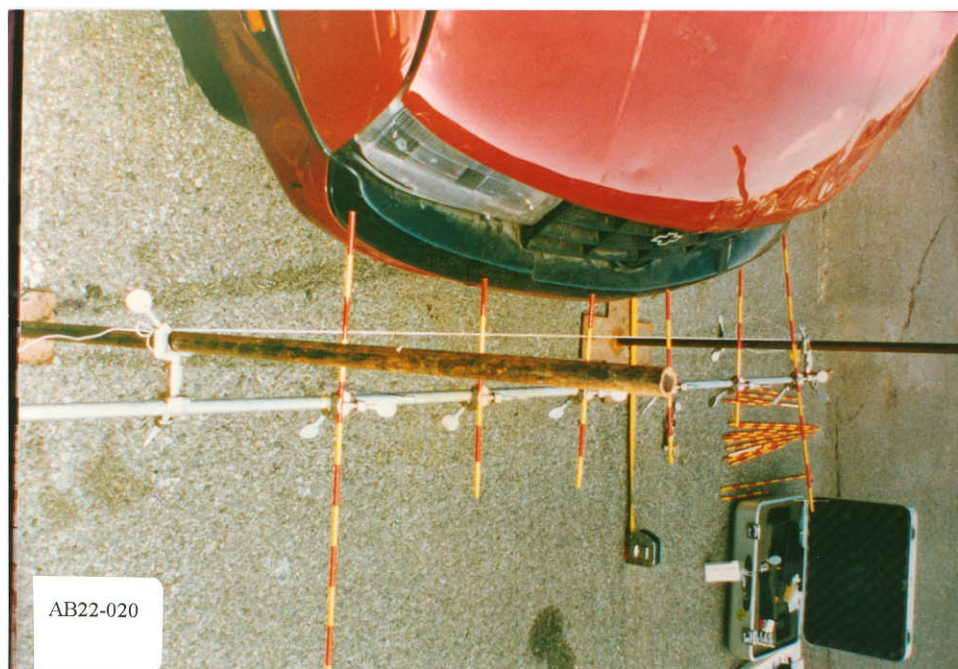
AB22-017



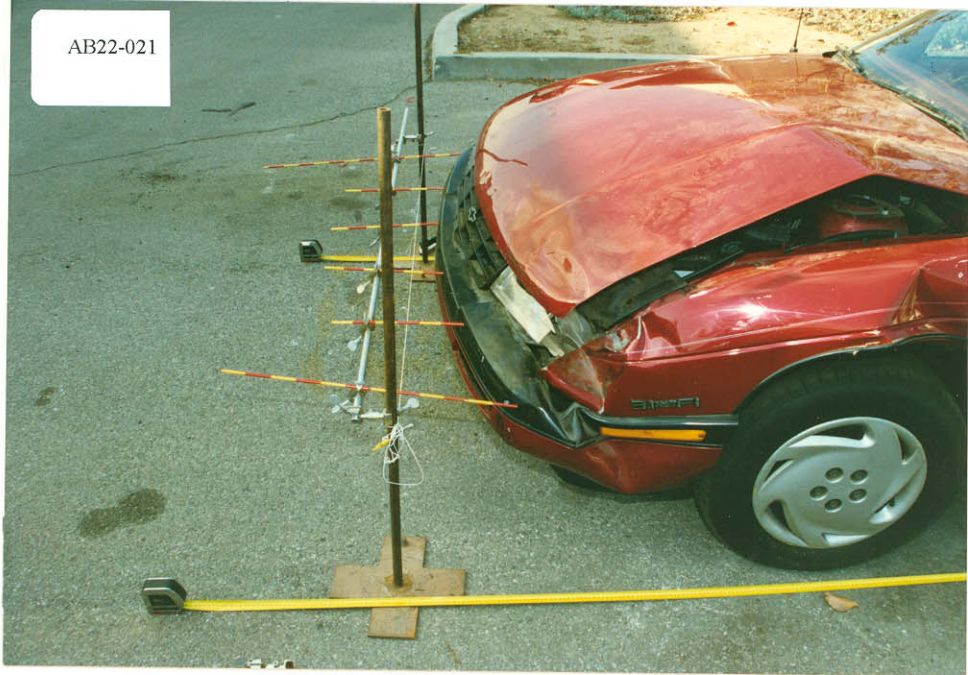
AB22-018



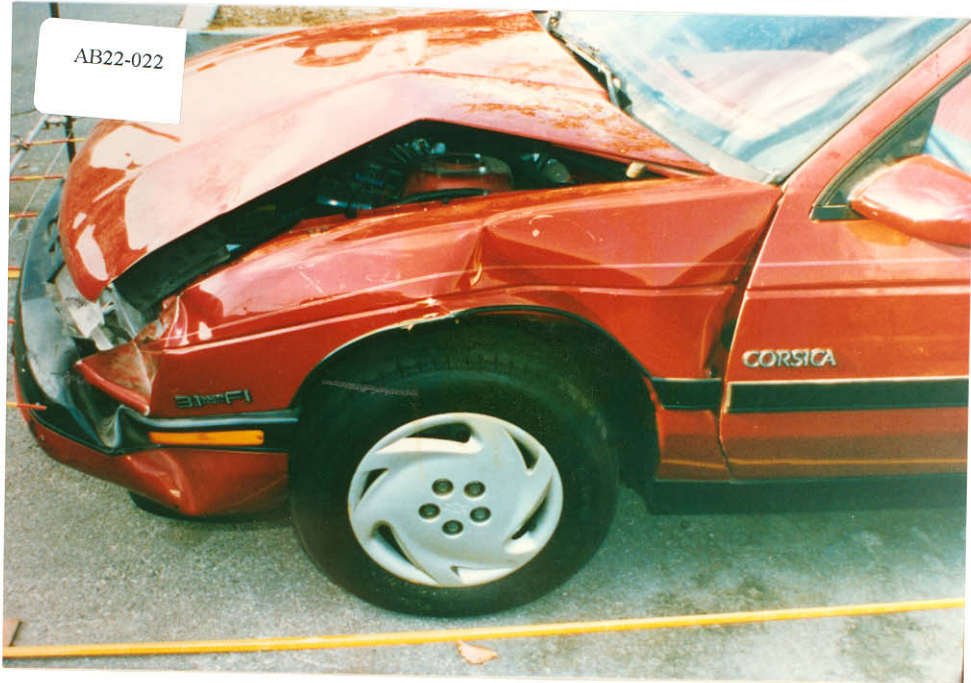




AB22-021



AB22-022

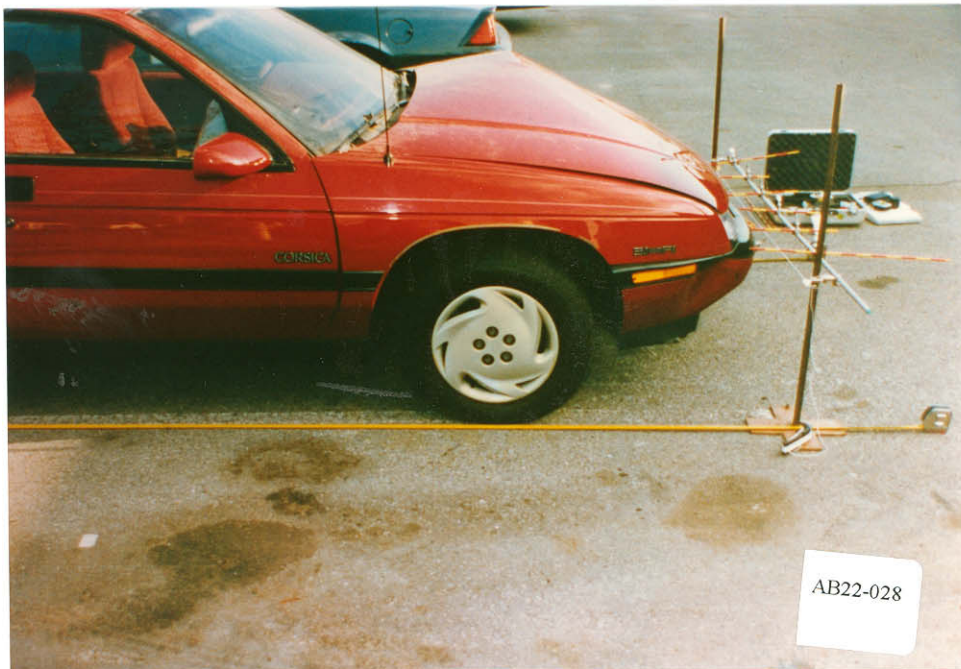


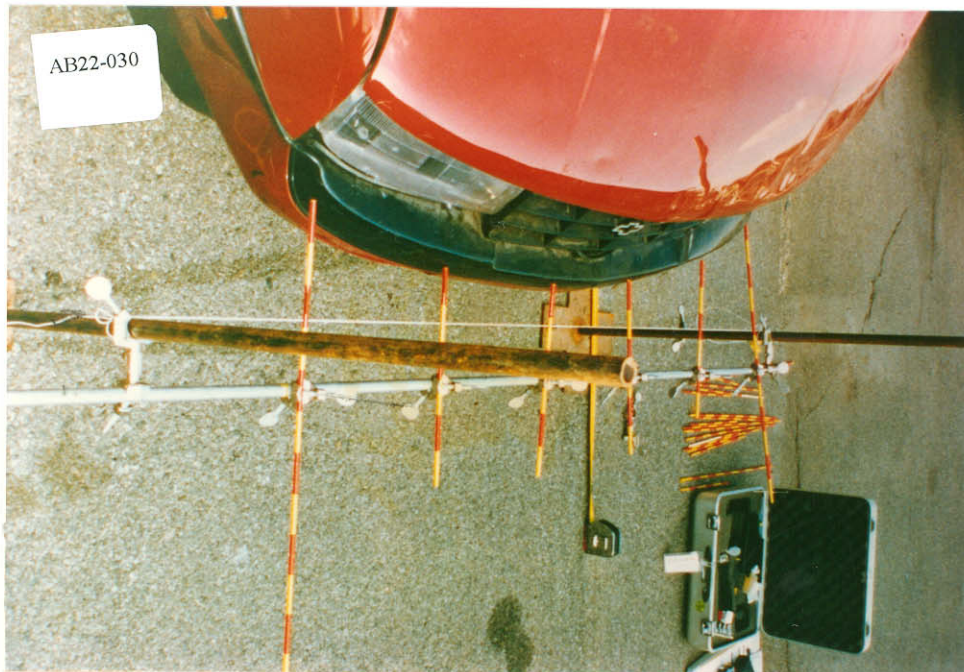
















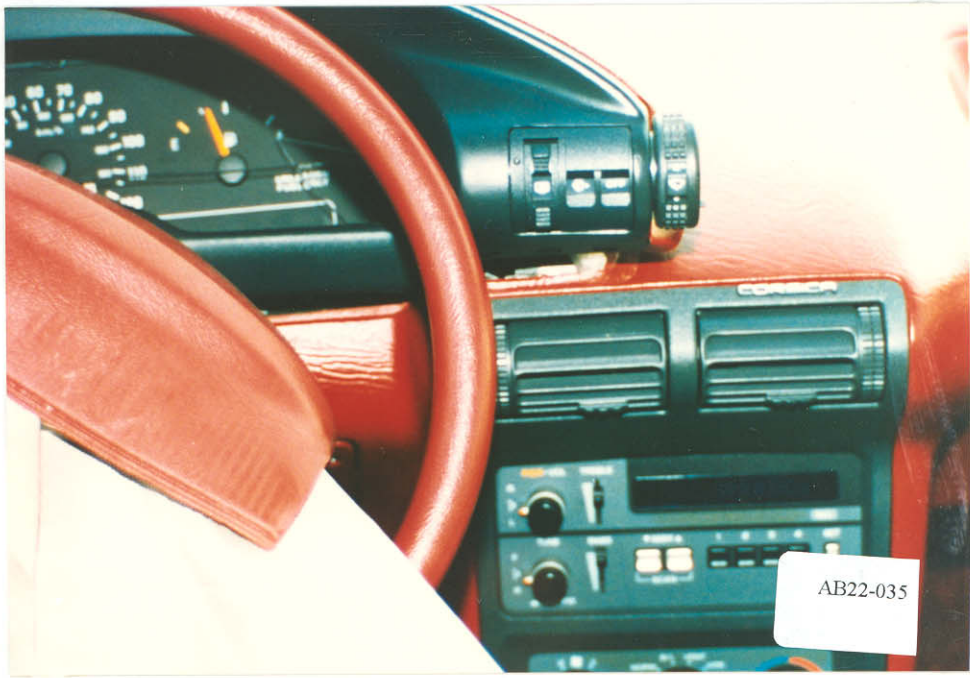
AB22-033



AB22-034





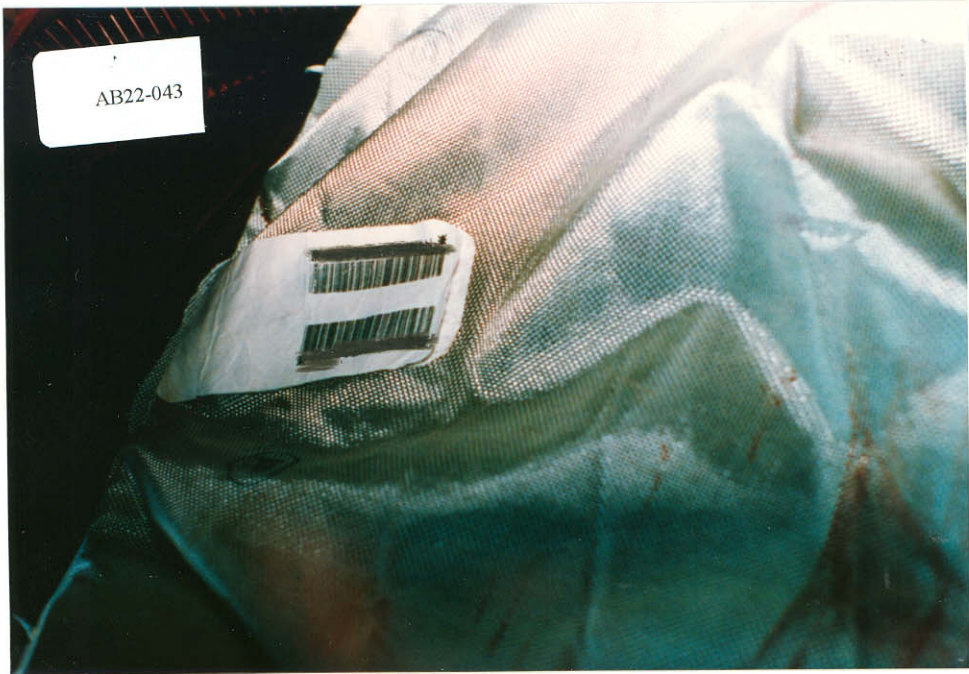
















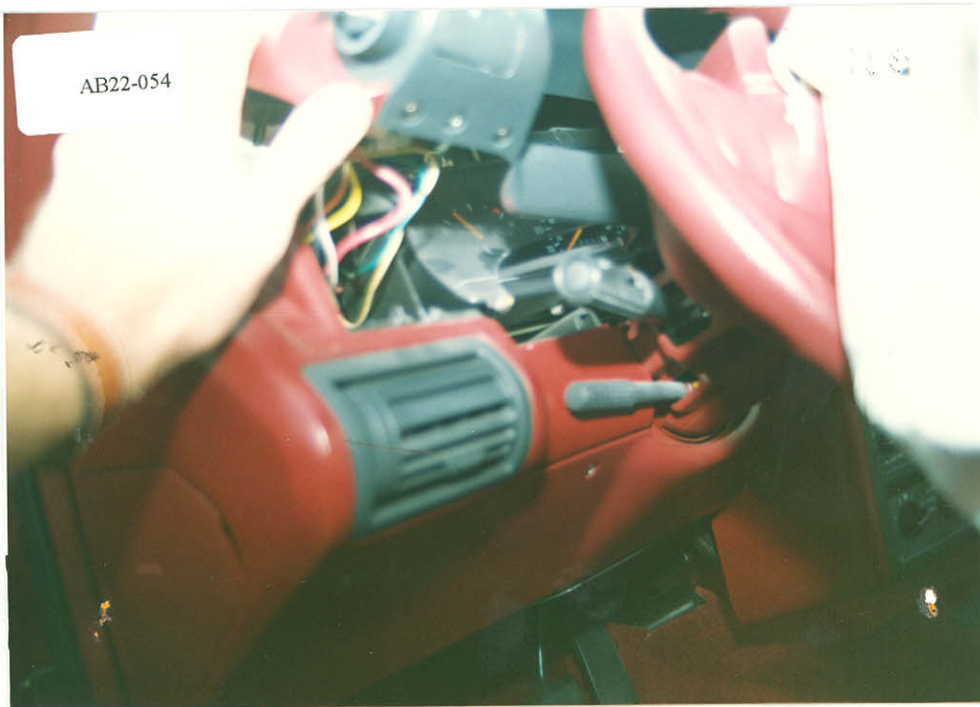
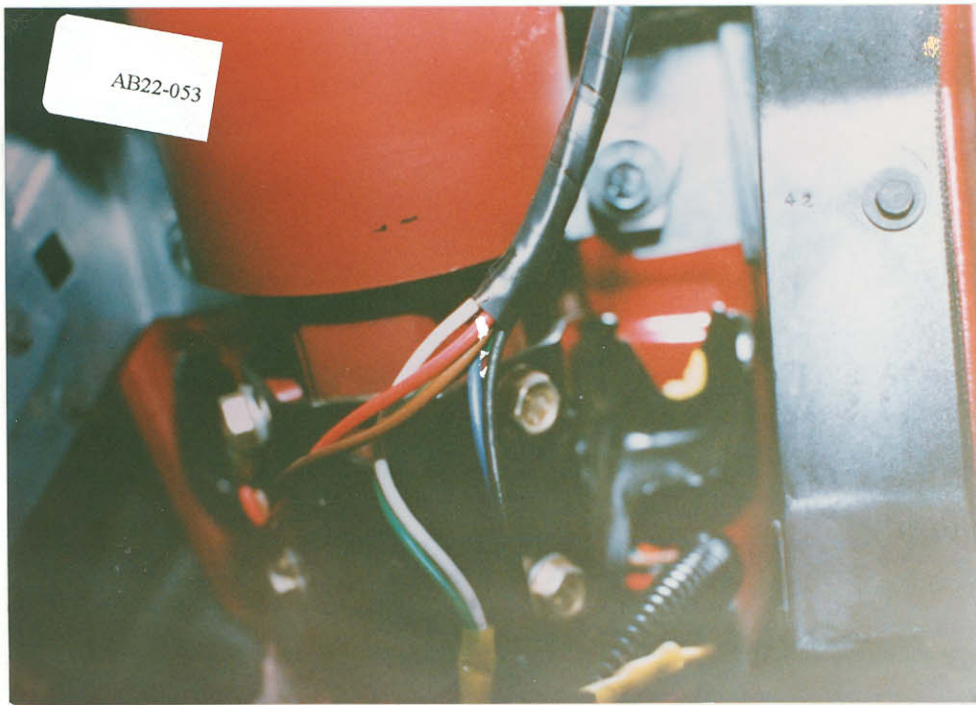


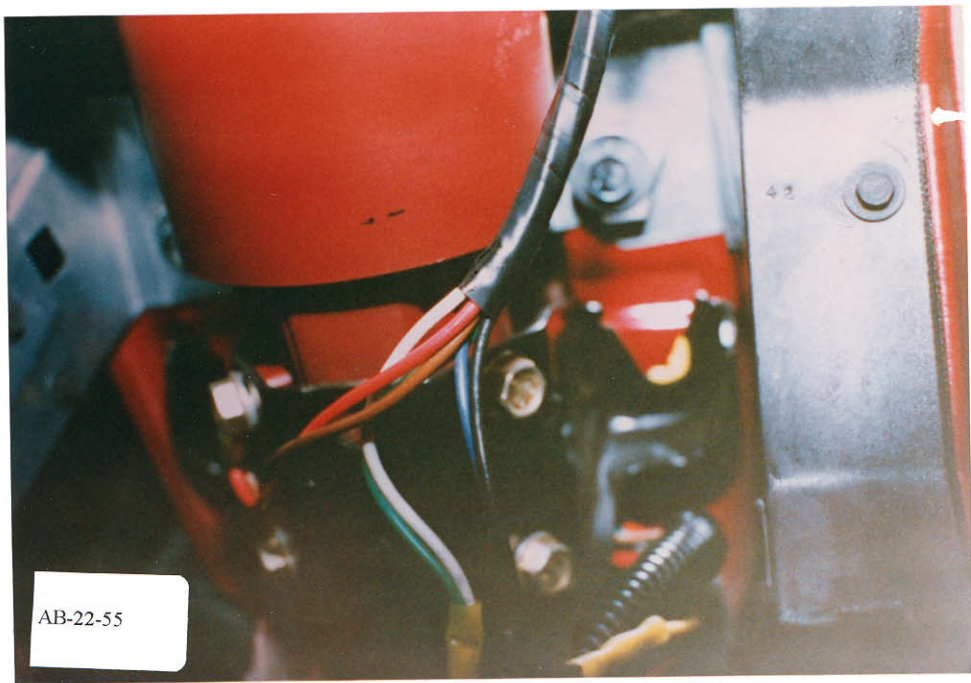


















DS94-22#1



DS 94-22 #2



DS94-22 #3



DS 94-22 #4





DS94-22 #5



DS94-22 #6



DS94-22#7



DS94-22 #8



DS 94-22 #9



DS94-22#10





DS94-22#11



DS94-22#12



DS 94-22 #13



DS 94-22 #14  
Best Available



DS 94-22 #15  
Best Available

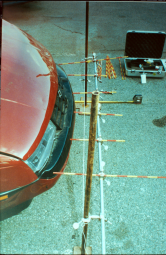


DS 94-22 #16  
Best Available



DS 94-22 #17  
Best Available





DS 94-22 #18  
Best Available



DS94-22#19



DS94-22 #20



DS94-22 #21



DS 94-22 #22



DS 94-22 #23





DS 94-22 #24  
Best Available



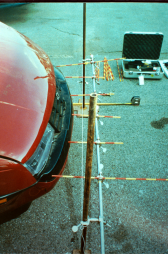
**DS 94-22 #25**  
**Best Available**



DS 94-22 #26  
Best Available



DS94-22 #27  
Best Available



DS 94-22 #28  
Best Available



DS 94-22 #29





DS 94-22 #30



DS94-22 #31



DS94-22#32



DS 94-22 #33



DS94-22 #34



DS94-22 #35





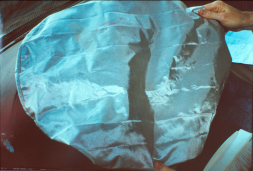
DS94-22 #36



DS94-22#37



DS 94-22 #38



DS94-22 #39



DS94-22#40

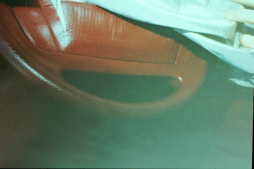


DS94-22 #41





DS94-22 #42



DS 94-22 #43



DS94-22 #44



DS94-22#45



DS94-22#46



DS 94-22 #47



DS94-22#48

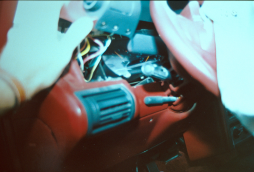




DS 94-22 #49



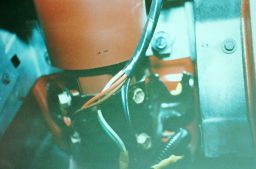
DS 94-22 #50



DS94-22 #51



DS 94-22 #52



DS 94-22453



DS94-22#54



DS94-22 #55

**POLICE PHOTO INDEX**

(Selected photos)

**Case No. DSI-94-AB-022**

<b>PHOTO NO.</b>	<b>VEHICLE NO.</b>	<b>DIRECTION OF PICTURE</b>	<b>SUBJECT MATTER</b>
1-4	1/2	East	Final rest of both vehicles. Photo #4 shows closeup of damage to Vehicle 1.
5	1/2	South	Final rest of both vehicles. This photo shows closeup of damage to both vehicles.
6-8	1/2	North	Final rest of both vehicles.
9	1/2	West	Close up view of final rest.
10-11	1/2	South	Final rest of both vehicles.
12-15	1	NA	Interior of vehicle.

**AUTOPSY PHOTO INDEX**

(Selected views)

**Case No. DSI-94-AB-022**

<b>PHOTO NO.</b>	<b>SUBJECT MATTER</b>
1	Lower arm abrasion.
2	Contusion to dorsal aspect of left hand.
3	Abrasion to chin and anterior neck, abrasion to left cheek, and abrasion to nares.
4	Closeup view of abrasion to chin and neck area.
5	Overview of victim.
6	View of cardiac injury.



Police  
AB20-001



Police  
AB20-002



Police  
AB20-003



Police  
AB20-004





Police  
AB20-005



Police  
AB20-006





Police  
AB20-007



Police  
AB20-008



Police  
AB20-009



Police  
AB20-010





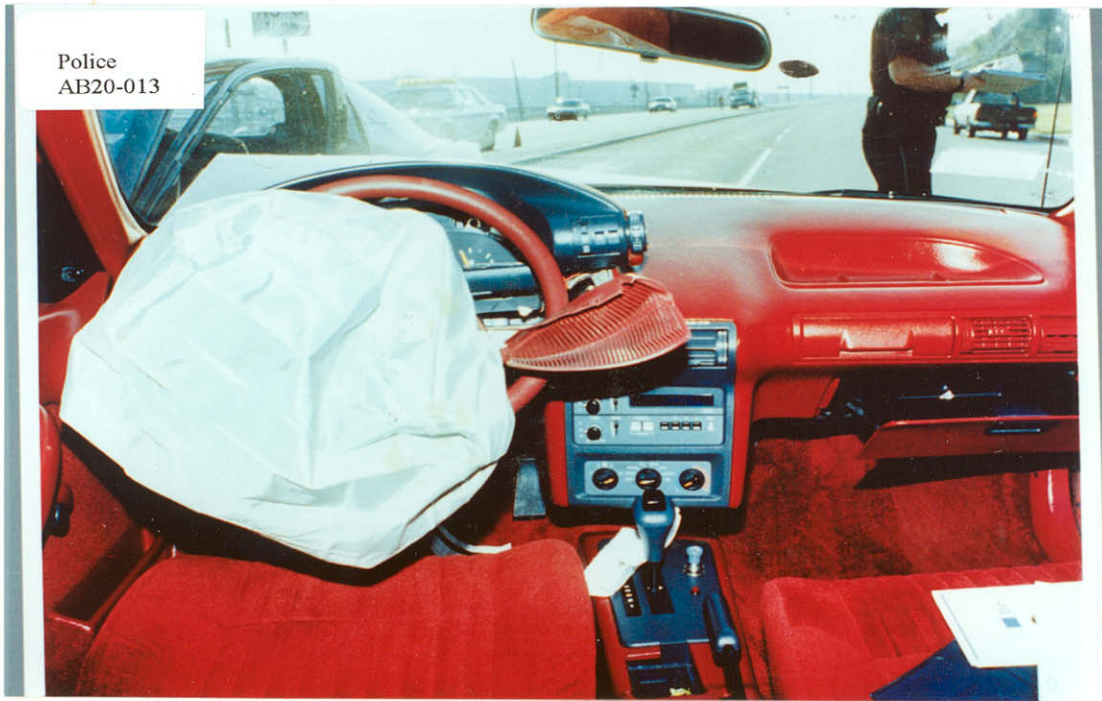
Police  
AB20-011



Police  
AB20-012



Police  
AB20-013

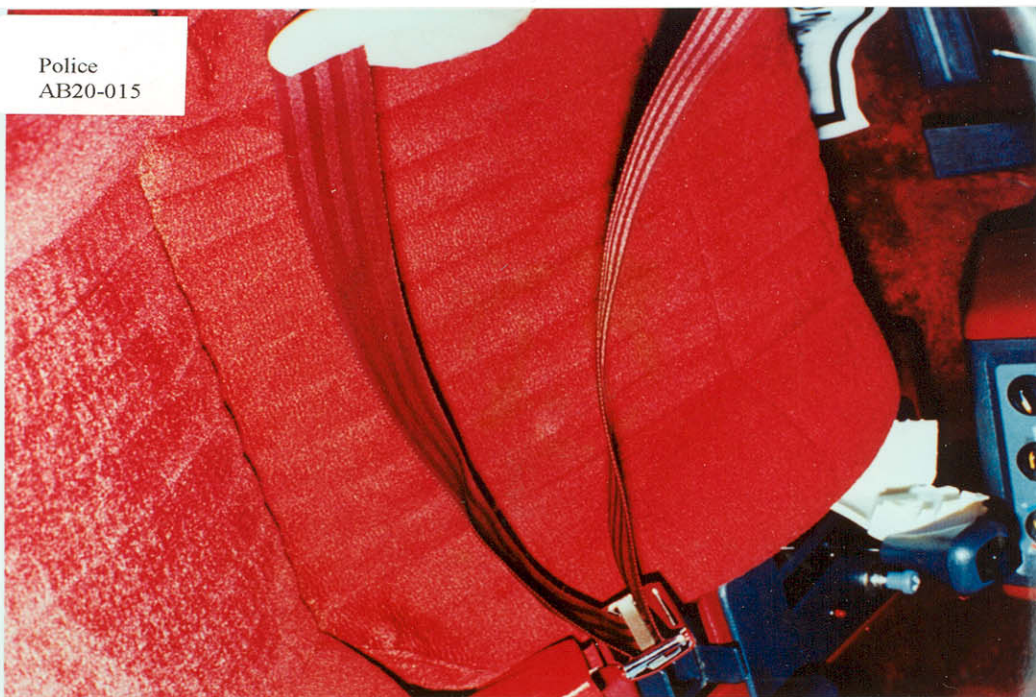


Police  
AB20-014





Police  
AB20-015





# **“GRAPHIC” PHOTOGRAPHS AND IMAGES**

The following “GRAPHIC” Photographs and Images have been removed from this case.

Autopsy Photo # 1-6

If you would like a copy of these photographs and/or images please write to:

MARJORIE SACCOCCIO  
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER  
55 BROADWAY  
CAMBRIDGE, MA 02142

In the body of your request please include the case, photograph and image number(s).

National Highway Traffic Safety  
Administration

## ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

AB 22

## IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted024. Date of Accident  
(Month, Day, Year)WINTER / WEEKDAY1 / 9 / 4

5. Time of Accident

MID AFTERNOON

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

## SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that  
has been completed; code 1 for the checked special  
studies and 0 for the special studies not checked.

6. SS15 Administrative Use

0

7. SS16 Pedestrian Crash Data Study

0

8. SS17 Impact Fires

0

9. SS18

0

10. SS19

0

## NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident01Code the number of events which occurred  
in this accident.

## ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other  
involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>01</u>	13. <u>01</u>	14. <u>02</u>	15. <u>F</u>	16. <u>02</u>	17. <u>01</u>	18. <u>L</u>
19. <u>02</u>	20. _____	21. _____	22. _____	23. _____	24. _____	25. _____
26. <u>03</u>	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____
33. <u>04</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>05</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

### CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

### TDC APPLICABLE VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo area (rear of trailer or straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

### (01-30) — Vehicle Number

#### Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): \_\_\_\_\_

(35) Noncollision injury \_\_\_\_\_

(38) Other noncollision (specify): \_\_\_\_\_

(39) Noncollision — details unknown \_\_\_\_\_

#### Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

(45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail) (specify): \_\_\_\_\_

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify): \_\_\_\_\_

(69) Unknown fixed object \_\_\_\_\_

#### Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant \_\_\_\_\_

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(79) Object fell from vehicle in-transport

(88) Other nonfixed object (specify): \_\_\_\_\_

(89) Unknown nonfixed object \_\_\_\_\_

(98) Other event (specify): \_\_\_\_\_

(99) Unknown event or object \_\_\_\_\_

National Highway Traffic Safety  
Administration

## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

0 1

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

9 2Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

2 0CHEVROLETApplicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

0 1 9CORSICAApplicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

0 4Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1 6 1 L T 5 3 T 9 N Y  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

## OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

1

- (0) Not towed due to vehicle damage
- 
- (1) Towed due to vehicle damage
- 
- (9) Unknown

10. Police Reported Travel Speed

9 9 9Code to the nearest kph (NOTE: 000 means  
less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown     mph X 1.6093 =      kph

11. Police Reported Alcohol Presence

9

- (0) No alcohol present
- 
- (1) Yes (alcohol present)
- 
- (7) Not reported
- 
- (8) No driver present
- 
- (9) Unknown

Note: See variables 37 through 55  
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

9 6Code actual value (decimal implied  
before first digit—0.xx)

- (95) Test refused
- 
- (96) None given
- 
- (97) AC test performed, results unknown
- 
- (98) No driver present
- 
- (99) Unknown

Source: PAR

## ACCIDENT RELATED

13. Speed Limit

0 8 0

- (000) No statutory limit
- 
- Code posted or statutory speed limit
- 
- in kph
- 
- (999) Unknown

50 mph X 1.6093 = 0 8 0 kph

14. Attempted Avoidance Maneuver

0 8

- (01) No avoidance actions
- 
- (02) Braking (no lockup)
- 
- (03) Braking (lockup)
- 
- (04) Braking (lockup unknown)
- 
- (05) Releasing brakes
- 
- (06) Steering left
- 
- (07) Steering right
- 
- (08) Braking and steering left
- 
- (09) Braking and steering right
- 
- (10) Accelerating
- 
- (11) Accelerating and steering left
- 
- (12) Accelerating and steering right
- 
- (97) No driver present
- 
- (98) Other action (specify):

(99) Unknown

15. Accident Type

8 3Applicable codes may be found on the  
back of page two of this field form

- (00) No impact
- 
- Code the number of the diagram that
- 
- best describes the accident circumstance
- 
- (98) Other accident type (specify):

(99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*

# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):

(09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify):

(29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify):
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## OCCUPANT RELATED

16. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
17. Number of Occupants This Vehicle φ 1  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
18. Number of Occupant Forms Submitted φ 1

24. Rollover φ  
 (0) No rollover (no overturning)
- Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
 \_\_\_\_\_
- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

## VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1, 1 8 0  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown
- 2, 6 φ 9 lbs X .4536 = 1, 1 8 3 kgs
- Source: \_\_\_\_\_

20. Vehicle Cargo Weight φ, 4 φ 0  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown
- \_\_\_\_\_, \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

## RECONSTRUCTION DATA

21. Towed Trailing Unit φ  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 1  
 (0) No  
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) φ  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted <45 degrees  
 (4) Tilted ≥45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) φ
26. Rear Override/Underride (this Vehicle) φ
- (0) No override/underride, or not an end-to-end impact
- Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_
- Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_
- (7) Medium/heavy truck or bus override  
 (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown

27. Heading Angle For This Vehicle 2 6 5
28. Heading Angle For Other Vehicle 1 7 5

Category	Configuration	ACCIDENT TYPES (Includes Intent)									
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN					
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN					
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN				
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 21 23	 24 SLOWER 25, 26, 27	 26 25 27	 28 DECEL. 29, 30, 31	 30 29 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN		
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 35 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 37 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 39 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 41 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 45 46 47	(EACH • 48) SPECIFICS OTHER		(EACH • 49) SPECIFICS UNKNOWN					
III. Same Trafficway Opposite Direction	G. Head-On	 50 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER		(EACH • 53) SPECIFICS UNKNOWN						
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 55 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 57 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 59 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 61 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER		(EACH • 67) SPECIFICS UNKNOWN						
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 69 INITIAL OPPOSITE DIRECTIONS	 70 71 INITIAL SAME DIRECTIONS	 72 73	(EACH • 74) SPECIFICS OTHER		(EACH • 75) SPECIFICS UNKNOWN				
	K. Turn Into Path	 76 77 TURN INTO SAME DIRECTION	 78 79 TURN INTO SAME DIRECTION	 80 81 TURN INTO OPPOSITE DIRECTIONS	 82 83 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) SPECIFICS OTHER		(EACH • 85) SPECIFICS UNKNOWN			
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87	 88 89	(EACH • 90) SPECIFICS OTHER		(EACH • 91) SPECIFICS UNKNOWN					
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact							



## 29. Basis for Total Delta V (highest)

2*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

Highest

32. Lateral Component of Delta V 0 0 0 19 Nearest kph (highest)

Nearest kph (secondary)

(NOTE: 000 means greater than  
-0.5 kph and less than +0.5 kph)  
( $\pm 160$ )  $\pm 159.5$  kph and above  
(999) Unknown

33. Energy Absorption

5982.9 8136.7 0 0 0 0

Nearest 100 joules (highest)

Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

## COMPUTER GENERATED DELTA V

30. Total Delta V

Highest

7.0 MPH 11.2

Nearest kph (highest)

Nearest kph (secondary)

(NOTE: 000 means less than  
0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

31. Longitudinal Component of  
Delta V0 0 1 17.6 MPH 11.2

Nearest kph (highest)

Nearest kph (secondary)

(NOTE: 000 means greater than  
-0.5 kph and less than +0.5 kph)  
( $\pm 160$ )  $\pm 159.5$  kph and above  
(999) Unknown

34. Confidence In Reconstruction Program  
Results (For Highest Delta V)

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES [ ☒ ] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

37. Police Reported Other Drug Presence 9

- (0) No other drug(s) present  
 (1) Yes [other drug(s) present]  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver φ

- (0) No DEC process available or given  
 (1) DEC process given, results known  
 (2) DEC process given, results unknown  
 (3) DEC process available, unknown if given  
 (8) No driver present

39. Other Drug Specimen Test Type For Driver 1

- (0) No specimen test given  
 (1) Blood test  
 (2) Urine test  
 (3) Other specimen tests (specify): \_\_\_\_\_  
 (7) Unspecified specimen test  
 (8) No driver present  
 (9) Unknown if specimen test given

### DRUG EVALUATION CLASSIFICATION

#### OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>φ</u>	41. <u>1</u>
Depressant Drug	42. <u>φ</u>	43. <u>1</u>
Stimulant Drug	44. <u>φ</u>	45. <u>1</u>
Hallucinogen Drug	46. <u>φ</u>	47. <u>1</u>
Cannabinoid Drug	48. <u>φ</u>	49. <u>1</u>
Phencyclidine (PCP)	50. <u>φ</u>	51. <u>1</u>
Inhalant Drug	52. <u>φ</u>	53. <u>1</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>φ</u>	55. <u>1</u>

## Codes For DEC Test Results

- (0) No DEC test given  
 (1) Passed DEC test  
 (2) Failed DEC test  
 (3) DEC test given—results unknown  
 (8) No driver present  
 (9) Unknown if DEC test given

## Codes for Specimen Test Results

- (0) No specimen test given  
 (1) Drug not found in specimen  
 (2) Drug found in specimen  
 (7) Specimen test given, results unknown or not obtained  
 (8) No driver present  
 (9) Unknown if specimen test given

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object

## National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

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## OTHER DATA

## 56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 Code actual 5-digit zip code  
 (99999) Unknown

## 57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify):  
 (9) Unknown

## 58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify):  
 (9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

## 59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify:  
 (9) Unknown rollover initiation type

## 60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

## 61. Rollover Initiation Object Contacted

## 62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (8) Non-contact rollover forces (specify):  
 (9) Unknown

## 63. Direction of Initial Roll

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

## PRECRASH DATA

## 64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify):  
 (98) No driver present  
 (99) Unknown

## PRECRASH DATA (Continued)

## 65. Critical Precrash Event

17*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): \_\_\_\_\_

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

## 66. Precrash Stability After Avoidance Maneuver

2

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_

(8) No driver present

(9) Precrash stability unknown

## 67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action)

1

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

# EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

A B Z Z

φ 1

## VEHICLE IDENTIFICATION

VIN 1 G 1 L T 5 3 T 9 N Y

Model Year 9 Z

Vehicle Make (specify): CHEVROLET

Vehicle Model (specify): CORSICA

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	LF BUMPER CORNER	

## CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	± D
		Width (CDC)	Max Crush								
1	BUMPER	52.7	9.6	51.5	9.6	5.1	3.1	2.4	2.75	5.3	
	- FREE SPACE		-4.φ		-4.φ	-1.75	-1.2	-1.2	-1.75	-4.φ	
			5.6		5.6	3.35	2.9	2.2	1.φ	1.3	φ
1	BUMPER	134	14	131	14	9	7	φ	3	3	φ

## VEHICLE DAMAGE SKETCH

## TIRE—WHEEL DAMAGE

a. Rotation physically restricted      b. Tire deflated

RF 2  
LF 1  
RR 2  
LR 2

RF 2  
LF 2  
RR 2  
LR 2

(1) Yes (2) No (8) NA (9) Unk.

## TYPE OF TRANSMISSION

☐ Manual    ☒ Automatic

## ORIGINAL SPECIFICATIONS

Wheelbase (103.5) 263 cm  
Overall Length (183.5) 466 cm  
Maximum Width (68.1) 173 cm  
Curb Weight (2609) 1186 kg  
Average Track \_\_\_\_\_ cm  
Front Overhang (37.8) 96 cm  
Rear Overhang (40.9) 104 cm  
Undeformed End Width (53) 135 cm  
Engine Size: cyl./displ. 3.1 L

WHEEL STEER ANGLES  
(For locked front wheels or displaced rear axles only)

RF  $\pm$  +2-3 °  
LF  $\pm$  +2-3 °  
RR  $\pm$  \_\_\_\_\_ °  
LR  $\pm$  \_\_\_\_\_ °

Within  $\pm$  5 degrees

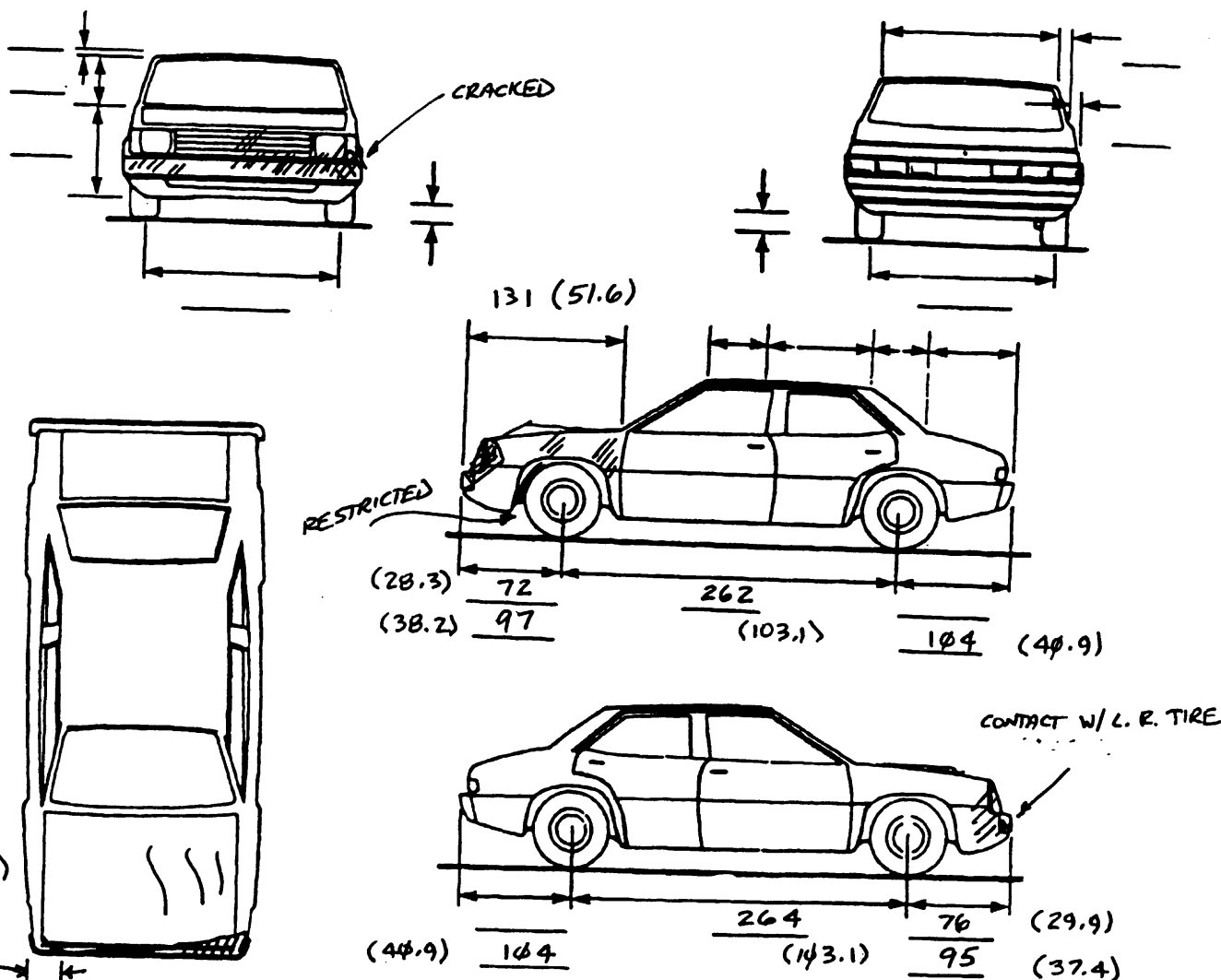
## DRIVE WHEELS

☒ FWD    ☐ RWD    ☐ 4WD

Approximate Cargo Weight NONE  
VISIBLE kg

ABS

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.  
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.



**CODES FOR OBJECT CONTACTED**

(99) Unknown event or object

[illegible]

## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>φ 1</u>	5. <u>φ 2</u>	6. <u>1 2</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>φ 1</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>± D</u>
<u>1 3 5</u>	<u>φ 1 4</u>	<u>φ φ 9</u>	<u>φ φ 7</u>	<u>φ φ 6</u>	<u>φ φ 3</u>	<u>φ φ 3</u>	<u>+ - φ φ φ</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>± D</u>
_____	_____	_____	_____	_____	_____	_____	<u>+ -</u>

26. Are CDCs Documented but Not Coded on The Automated File? φ  
 (0) No  
 (1) Yes

27. Researcher's Assessment of Vehicle Disposition 1  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

28. Original Wheelbase 2 6 3  
 \_\_\_\_\_ Code to the nearest centimeter  
 (999) Unknown

1 φ 3 . 5 inches X 2.54 = 2 6 3 centimeters

29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

φ

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

φ

(0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

31. Origin of Fire

φ

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_  
\_\_\_\_\_

(9) Unknown

32. Type of Fuel Tank-1

1

33. Type of Fuel Tank-2

φ

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

34. Fuel Tank-1 Location

1

35. Fuel Tank-2 Location

φ

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle) left  
side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
\_\_\_\_\_

(9) Unknown

36. Fuel Tank-1 Filler Cap Location

3

37. Fuel Tank-2 Filler Cap Location

φ

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle) on  
left side plane  
(3) Aft of center of the rear wheels (rear axle) on  
right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear axle)  
on left side plane  
(7) Over the center of the rear wheels (rear axle)  
on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

38. Fuel Tank-1 Damage

1

39. Fuel Tank-2 Damage

φ

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
\_\_\_\_\_

(9) Unknown

## National Accident Sampling System-Crashworthiness Data System: Exterior Vehicle Form

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40. Location of Fuel System-1 Leakage

1

41. Location of Fuel System-2 Leakage

φ

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify):

(9) Unknown

42. Fuel Type-1

φ 1

43. Fuel Type-2

φ φ*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify):

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify):

(98) Other Hybrid (specify):

(99) Unknown fuel type

44. Is This Vehicle Equipped With More Than Two Fuel Tanks?

φ

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location):(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank

Tank location

Filler cap location

Tank damage

Location of leakage

Type of fuel

(9) Unknown if more than two tanks

**COMMENTS**

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
 (I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

National Highway Traffic Safety  
Administration

## INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

φ 1

## INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

φ φ

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H φ

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch  
Opening in Collision. If IV05-IV09 ≠ 2, Then code 010. LF φ 11. RF φ 12. LR φ 13. RR φ 14. TG/H φ

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,  
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

## GLAZING

Glazing Damage from Impact Forces

15. WS φ 16. LF φ 17. RF φ 18. LR φ 19. RR φ20. BL φ 21. Roof φ 22. Other φ

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from  
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS φ 24. LF φ 25. RF φ 26. LR φ 27. RR φ28. BL φ 29. Roof φ 30. Other φ

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant  
contact and not holed by occupant contact(5) Glazing out-of-place by occupant contact and holed by  
occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No  
Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS φ 32. LF φ 33. RF φ 34. LR φ 35. RR φ36. BL φ 37. Roof φ 38. Other φ

(0) No glazing contact and no damage, or no glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted

(4) AS-14 — Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS φ 40. LF φ 41. RF φ 42. LR φ 43. RR φ44. BL φ 45. Roof φ 46. Other φ

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

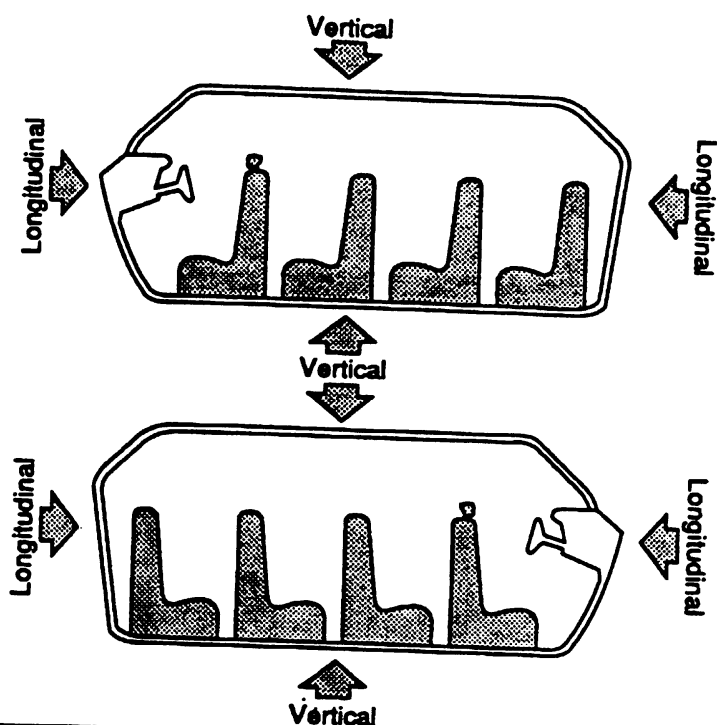
(3) Partially opened

(4) Fully opened

(9) Unknown

**Note: Sketch intruded areas**

**Note: Sketch intruded areas**



**Document no more than the 15 most severe intrusions**

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): \_\_\_\_\_

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown



# STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
⊘	—	⊘	=	⊘
	—		=	
/	—	/	=	/

**STEERING COLUMN**

## 87. Steering Column Type

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify):

(9) Unknown

2

## 88. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X

## 89. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X X

## 90. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X X

## 91. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

X X X

## 92. Steering Rim/Spoke Deformation

- Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

0 0

## 93. Location of Steering Rim/Spoke Deformation

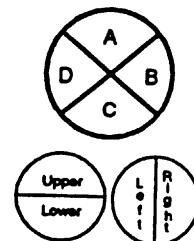
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke

- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

**INSTRUMENT PANEL**

## 94. Odometer Reading

0 1 6,000

kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

009,001 miles X 1.6093 = 015,901 kilometers

Source: VEH. INSPECTION

## 95. Instrument Panel Damage from Occupant Contact?

- (0) No  
 (1) Yes  
 (9) Unknown

1

## 96. Knee Bolsters Deformed from Occupant Contact?

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

0

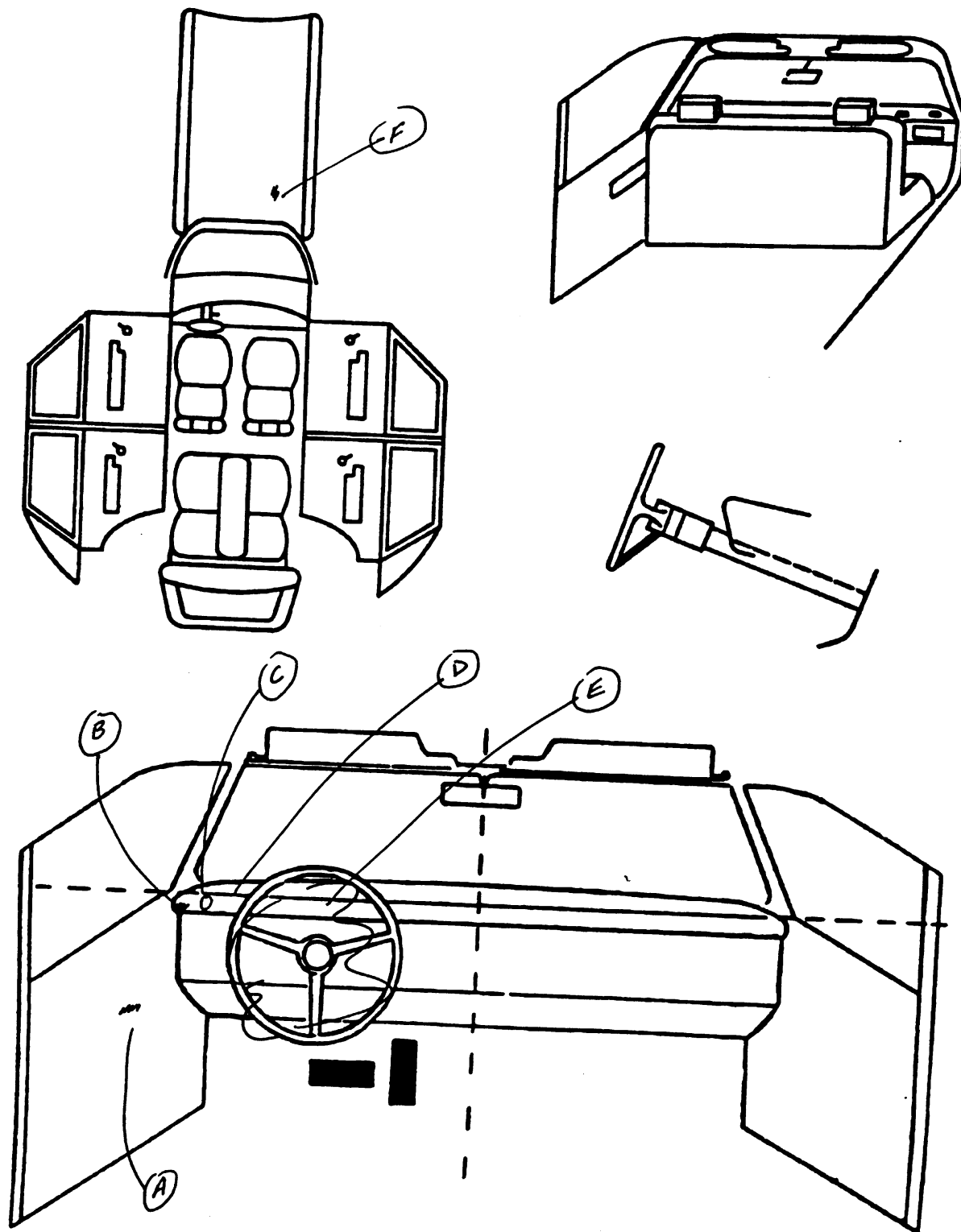
## 97. Did Glove Compartment Door Open During Collision(s)?

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

0

# VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
 Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
 Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	21	01	-	SCUFF	3
B	09	01	L. HAND?	SCUFF	3
C	09	01	L. HAND?	SWITCH OFF	3
D	09	01	-	SPEEDOMETER CRACKED/ENTIRE PANEL SHIFTED	2
E	45	01	FACE	LIPSTICK	1
F	54	01?	-	SMALL SCUFF	3
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_
- (28) Left side window sill

## RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_
- (38) Right side window sill

## INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_

- (49) Other interior object (specify): \_\_\_\_\_

## ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

## REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F I R S T	Availability/Function		
	Deployment		
	Failure	/	/

#### Air Bag System Availability/Function

- (0) Not equipped/not available
- (1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_
- (3) Air bag not reinstalled
- (9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

#### Are There Indications of Air Bag System Failure?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): RESTRICTED DEPLOYMENT
- (9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	/	/
	Use	/	/
	Type	/	/
	Proper Use	/	/
	Failure Modes	/	/

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_
- (8) Other improper use of automatic belt system (specify): \_\_\_\_\_
- (9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_
- (9) Unknown

## MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4		4
	Evidence of usage	04		04
	Used in this crash?	YES		NO
	Proper Use	YES 1		NA
	Failure Modes	1		
SECOND	Availability	4	3	4
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

**Integral Belt Partially Destroyed**

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used - type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat - type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

**Proper Use of Manual (Active) Belts**

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

**Belt Used Improperly**

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**Manual (Active) Belt Failure Modes During Accident**

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model						

Specify Below for Each Child Safety Seat

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

### 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

### 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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**HEAD RESTRAINTS/SEAT EVALUATION**

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
<b>FIRST</b>	Head Restraint Type/Damage	3	/	3
	Seat Type	41	/	41
	Seat Performance	1	/	1
	Seat Orientation	1	/	1
<b>SECOND</b>	Head Restraint Type/Damage	4	4	4
	Seat Type	43	43	43
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
<b>THIRD</b>	Head Restraint Type/Damage	/	/	/
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
<b>OTHER</b>	Head Restraint Type/Damage	/	/	/
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify):

(9) Unknown

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):

(10) Box mounted seat (i.e., van type)

(99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify:
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):

(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):

(9) Unknown

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [ ☒ ] Yes [    ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No [ ☒ ] Yes [    ]

Describe entrapment mechanism:

---



---



---

Component(s):

(Note in vehicle interior diagram)



## OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

0 1

4. Occupant Number

0 1

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

7 3

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

1 5 0Code actual height to the nearest  
centimeter.

(999) Unknown

59 inches X 2.54 = 1 5 0 centimeters

8. Occupant's Weight

0 5 0Code actual weight to the nearest  
kilogram.

(999) Unknown

1 2 0 pounds X .4536 = 0 5 0 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

1 1

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used—type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat—type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

26. Seat Type (this Occupant Position)

41

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model φ φ φ

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat φ

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation φ φ

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage φ φ32. Child Safety Seat Shield Usage φ φ33. Child Safety Seat Tether Usage φ φNote: Options below applicable to  
Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**34. Injury Severity (Police Rating) 4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

37. Hospital Stay 0 0

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 9 7

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 0 1

- \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0 141. 2nd Medically Reported Cause of Death 0 242. 3rd Medically Reported Cause of Death 0 3

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

(99) Unknown

43. Number of Recorded Injuries for This Occupant 1 2

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function** φ

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

**45. Automatic (Passive) Belt System Use** φ

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_

- (3) Automatic belt use unknown
- (9) Unknown

**46. Automatic (Passive) Belt System Type** φ

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System** φ

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

- (8) Other improper use of automatic belt system (specify): \_\_\_\_\_
- (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident** φ

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_

- (9) Unknown

**49. Seat Orientation (this Occupant Position)** 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

- (9) Unknown

**Check the Primary Source Used In Determining Belt Use.**

- [ ] Not equipped/not available/destroyed or rendered inoperative
- [ ] Vehicle inspection
- [ ] Official injury data
- [ ] Driver/occupant interview
- [ ] Other (specify): \_\_\_\_\_

- [ ] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [ ] YES ☒

UPDATE CANDIDATE?

NO ☒ YES [ ]



**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER****BELT USE DETERMINATION****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 9 7  
(at Medical Facility)  
(00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

51. Was the Occupant Given Blood? 9  
(1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  9 7  
(00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the  $\text{HCO}_3$   
(96) ABGs reported,  $\text{HCO}_3$  unknown  
(97) Injured, details unknown  
(99) Unknown if injured

53. Primary Source of Belt Use Determination B  
(0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): WITNESSES  
(9) Unknown if belt used



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT INJURY FORM

Form Approved  
O.M.S. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

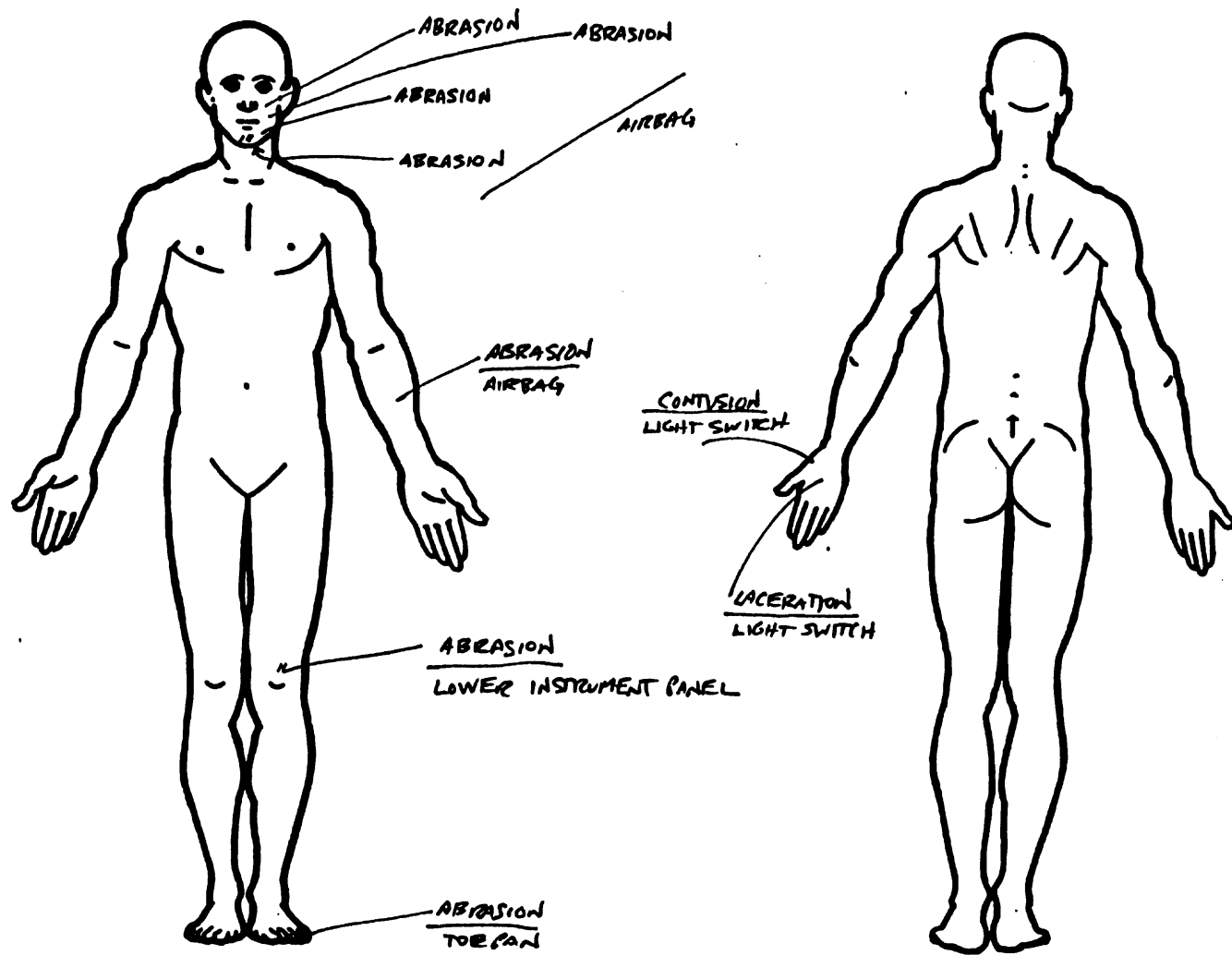
	Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					Aspect
1st	5. <u>1</u>	6. <u>4</u>	7. <u>2</u>	8. <u>02</u>	9. <u>18</u>	10. <u>6</u>	11. <u>4</u>	12. <u>16</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>1</u>	17. <u>4</u>	18. <u>4</u>	19. <u>10</u>	20. <u>16</u>	21. <u>6</u>	22. <u>4</u>	23. <u>16</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>1</u>	28. <u>4</u>	29. <u>4</u>	30. <u>10</u>	31. <u>02</u>	32. <u>3</u>	33. <u>4</u>	34. <u>16</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>1</u>	39. <u>2</u>	40. <u>9</u>	41. <u>02</u>	42. <u>02</u>	43. <u>1</u>	44. <u>4</u>	45. <u>45</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>1</u>	50. <u>0</u>	51. <u>9</u>	52. <u>02</u>	53. <u>02</u>	54. <u>1</u>	55. <u>2</u>	56. <u>09</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
6th	60. <u>1</u>	61. <u>0</u>	62. <u>9</u>	63. <u>02</u>	64. <u>02</u>	65. <u>1</u>	66. <u>2</u>	67. <u>56</u>	68. <u>2</u>	69. <u>1</u>	70. <u>00</u>
7th	71. <u>1</u>	72. <u>7</u>	73. <u>9</u>	74. <u>06</u>	75. <u>00</u>	76. <u>1</u>	77. <u>2</u>	78. <u>09</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>
8th	82. <u>1</u>	83. <u>7</u>	84. <u>9</u>	85. <u>04</u>	86. <u>02</u>	87. <u>1</u>	88. <u>2</u>	89. <u>09</u>	90. <u>1</u>	91. <u>1</u>	92. <u>00</u>
9th	93. <u>1</u>	94. <u>2</u>	95. <u>9</u>	96. <u>02</u>	97. <u>02</u>	98. <u>1</u>	99. <u>2</u>	100. <u>45</u>	101. <u>1</u>	102. <u>1</u>	103. <u>00</u>
10th	104. <u>1</u>	105. <u>7</u>	106. <u>9</u>	107. <u>02</u>	108. <u>02</u>	109. <u>1</u>	110. <u>2</u>	111. <u>45</u>	112. <u>1</u>	113. <u>1</u>	114. <u>00</u>

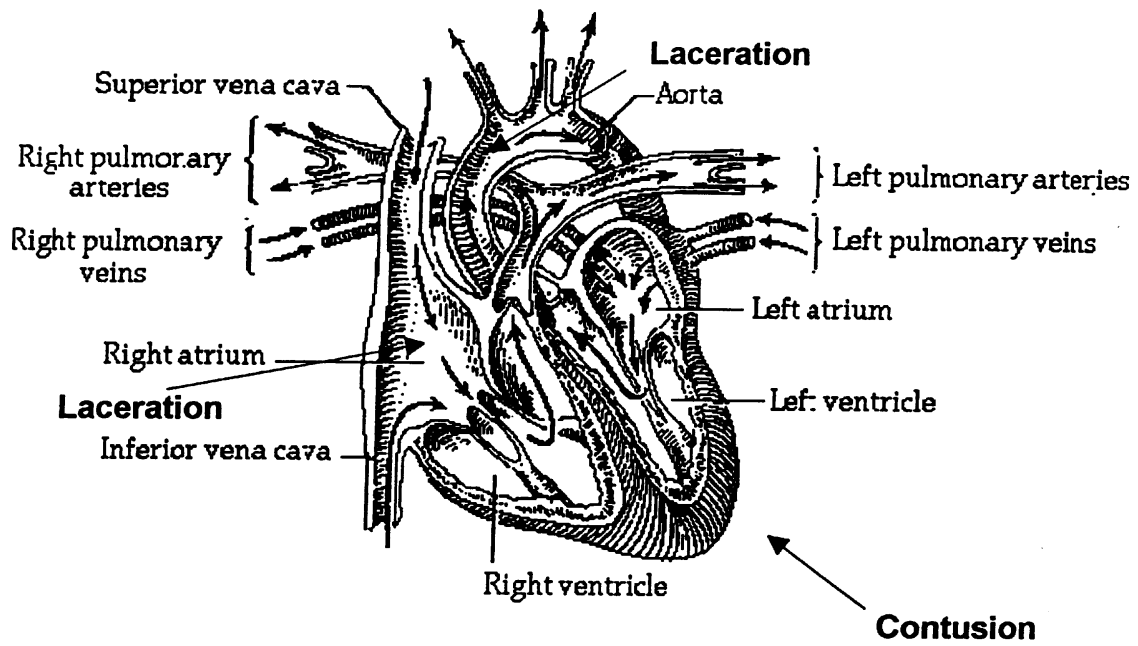
### OCCUPANT INJURY DATA

[illegible]

# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

Arterial Blood  
Gases

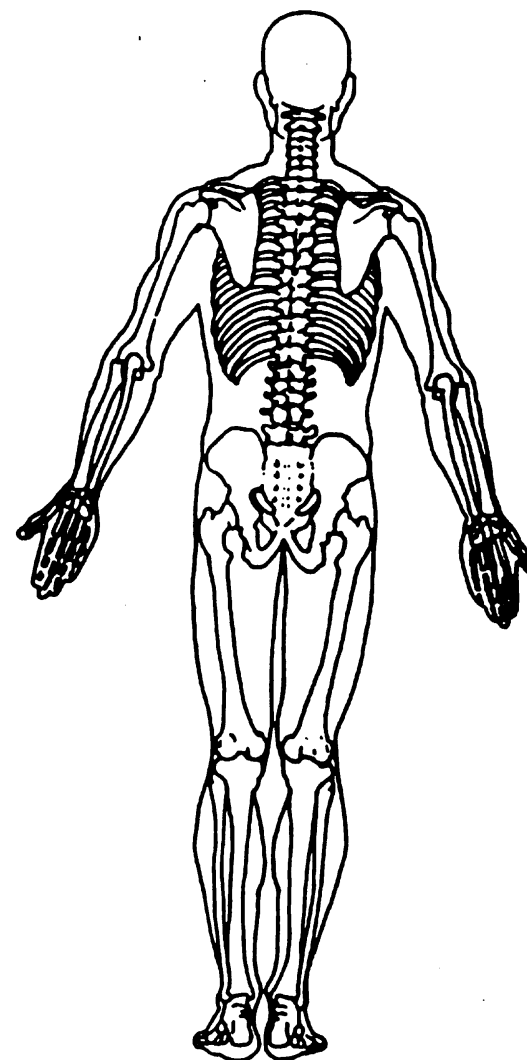
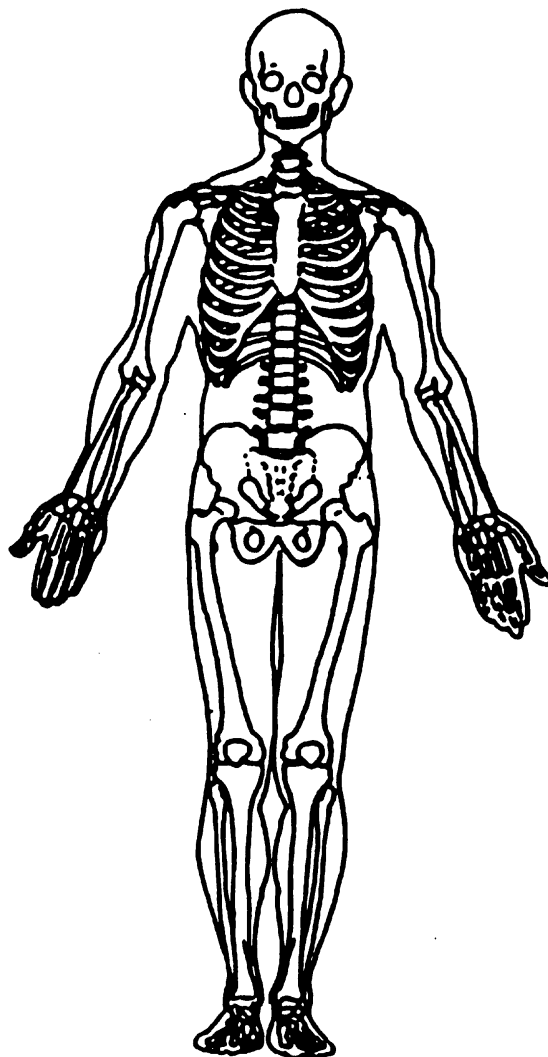
pH = \_\_\_

PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> = \_\_\_

HCO<sub>3</sub> = \_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## SOURCE OF INJURY DATA

### OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_

- (9) Police

## INJURY SOURCE

### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### FLOOR

- (55) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

### EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or trim (specify): \_\_\_\_\_
- (68) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): \_\_\_\_\_
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

## INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

### Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

### Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

#### Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NPS
- (90) Trauma, other than mechanical

#### Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

### Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

### Vessels, Nerves, Organs, Bones

Joint are assigned consecutive two digit numbers beginning with 02

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NPS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NPS as to lesion or severity.

### Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

### Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

0 2

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

9 0

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

MITSUBISHI

5 2

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

ECLIPSE

0 3 7

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

0 3

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

## OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

1

(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

10. Police Reported Travel Speed

9 9 9

Code to the nearest kph (NOTE: 000 means  
less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

\_\_\_ mph X 1.6093 = \_\_\_ kph

11. Police Reported Alcohol Presence

0

(0) No alcohol present  
(1) Yes (alcohol present)  
(7) Not reported  
(8) No driver present  
(9) UnknownNote: See variables 37 through 55  
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

9 6

Code actual value (decimal implied  
before first digit—0.xx)(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: \_\_\_\_\_

## ACCIDENT RELATED

13. Speed Limit

0 4 0

(000) No statutory limit  
Code posted or statutory speed limit  
in kph  
(999) Unknown

25 mph X 1.6093 = 0 4 0 kph

14. Attempted Avoidance Maneuver

0 1

(01) No avoidance actions  
(02) Braking (no lockup)  
(03) Braking (lockup)  
(04) Braking (lockup unknown)  
(05) Releasing brakes  
(06) Steering left  
(07) Steering right  
(08) Braking and steering left  
(09) Braking and steering right  
(10) Accelerating  
(11) Accelerating and steering left  
(12) Accelerating and steering right  
(97) No driver present  
(98) Other action (specify):

(99) Unknown

15. Accident Type

8 2

Applicable codes may be found on the  
back of page two of this field form(00) No impact  
Code the number of the diagram that  
best describes the accident circumstance  
(98) Other accident type (specify):

(99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*



# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_

- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## OCCUPANT RELATED

16. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
17. Number of Occupants This Vehicle 4 1  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
18. Number of Occupant Forms Submitted 4 1

## VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1 1 5 0  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2,524 lbs X .4536 = 1,145 kgs  
 Source:
20. Vehicle Cargo Weight 9 9 9 0  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
           lbs X .4536 =            kgs

## RECONSTRUCTION DATA

21. Towed Trailing Unit 4  
 (0) No towed unit  
 (1) Yes—towed trailing unit  
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 1  
 (0) No  
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 4  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted < 45 degrees  
 (4) Tilted ≥ 45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
                                      
 (9) Unknown

24. Rollover 4  
 (0) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):

- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 4
26. Rear Override/Underride (this Vehicle) 4  
 (0) No override/underride, or not an end-to-end impact  
*Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
                                      
*Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
                                      
 (7) Medium/heavy truck or bus override  
 (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown
27. Heading Angle For This Vehicle 1 7 5
28. Heading Angle For Other Vehicle 2 6 5

Category	Configuration	ACCIDENT TYPES (Includes Intent)							
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN			
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN			
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN		
II Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 26, 27	 24 DECEL. 29, 30, 31	 26 AVOID COLLISION WITH VEH.	 28 AVOID COLLISION WITH OBJECT	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN	
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 42 AVOID COLLISION WITH VEH.	 44 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 LATERAL MOVE	 45 LATERAL MOVE	 46 LATERAL MOVE	 47 LATERAL MOVE	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN		
III Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN				
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 62 AVOID COLLISION WITH VEH.	 64 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN				
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 69 INITIAL SAME DIRECTIONS	 70 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 72 INITIAL OPPOSITE DIRECTIONS	 73 INITIAL SAME DIRECTIONS	(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN
	K. Turn Into Path	 76 TURN INTO SAME DIRECTION	 77 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 79 TURN INTO OPPOSITE DIRECTIONS	 80 TURN INTO OPPOSITE DIRECTIONS	 81 TURN INTO OPPOSITE DIRECTIONS	 82 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) SPECIFICS OTHER
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 VEH. MOVING STRAIGHT	 87 VEH. MOVING STRAIGHT	 88 VEH. MOVING STRAIGHT	 89 VEH. MOVING STRAIGHT	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN		
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact					

## 29. Basis for Total Delta V (highest)

2*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

## COMPUTER GENERATED DELTA V

## 30. Total Delta V

Highest

0 1 21.3 11.7 Nearest kph (highest)

\_\_\_\_ Nearest kph (secondary)

(NOTE: 000 means less than  
0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

## 31. Longitudinal Component of Delta V

+ 0 0 0 21.3 2.0 Nearest kph (highest)

\_\_\_\_ Nearest kph (secondary)

(NOTE: \_\_000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(\_\_999) Unknown

## 32. Lateral Component of Delta V

Highest

⊕ - 4 1 2+1.2 11.6 Nearest kph (highest)

\_\_\_\_ Nearest kph (secondary)

(NOTE: \_\_000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(\_\_999) Unknown

## 33. Energy Absorption

4 0 5 3 0 03928.4 5342.6 Nearest 100 joules (highest)

\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

## 34. Confidence In Reconstruction Program Results (For Highest Delta V)

1

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

## 35. Type of Vehicle Inspection

2

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):  
PHOTOS ONLY

## 36. Is this an AOPS Vehicle?

3

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

37. Police Reported Other Drug Presence φ

- (0) No other drug(s) present
- (1) Yes [other drug(s) present]
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver φ

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver φ

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): \_\_\_\_\_
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

**DRUG EVALUATION CLASSIFICATION****OTHER DRUGS TEST RESULTS FOR DRIVER**

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>φ</u>	41. <u>φ</u>
Depressant Drug	42. <u>φ</u>	43. <u>φ</u>
Stimulant Drug	44. <u>φ</u>	45. <u>φ</u>
Hallucinogen Drug	46. <u>φ</u>	47. <u>φ</u>
Cannabinoid Drug	48. <u>φ</u>	49. <u>φ</u>
Phencyclidine (PCP)	50. <u>φ</u>	51. <u>φ</u>
Inhalant Drug	52. <u>φ</u>	53. <u>φ</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>φ</u>	55. <u>φ</u>

## Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

## Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object \_\_\_\_\_

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object \_\_\_\_\_

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object \_\_\_\_\_

## OTHER DATA

## 56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 Code actual 5-digit zip code  
 (99999) Unknown

## 57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify):  
 (9) Unknown

## 58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify):  
 (9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

## 59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify):  
 (9) Unknown rollover initiation type

## 60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

## 61. Rollover Initiation Object Contacted

0 0

## 62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

0

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (8) Non-contact rollover forces (specify):  
 (9) Unknown

## 63. Direction of Initial Roll

0

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

## PRECRASH DATA

## 64. Pre-Event Movement (Prior to Recognition of Critical Event)

1 0

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify):  
 (98) No driver present  
 (99) Unknown

## PRECRASH DATA (Continued)

## 65. Critical Precrash Event

15*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off)  
(specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.)  
(specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed  
(i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle  
in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left  
lane line
- (61) From adjacent lane (same direction)—over right  
lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same  
direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite  
direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details  
unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway  
(specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching  
roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown  
location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): \_\_\_\_\_

(99) Unknown

For Corrective Actions Attempted see variable GV14  
(Attempted Avoidance Manuever)66. Precrash Stability After Avoidance Maneuver ϕ

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30  
degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of  
Avoidance Maneuver (Corrective Action) ϕ

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance  
maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane  
where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left  
travel lane where avoidance maneuver was  
initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

# CRASHPC PROGRAM SUMMARY

## Identifying Title

Primary  
Sampling Unit

Case No.—Stratum

Accident Event  
Sequence No.

Date (month, day, year) of Run

## CRASHPC Vehicle Identification

Vehicle	Year	Make	Model	NASS Veh. No.
Vehicle 1	1992	CHEVROLET	CORSICA	1
Vehicle 2	1990	MITSUBISHI	ECLIPSE	2

## GENERAL INFORMATION

VEHICLE 1				VEHICLE 2			
Size				Size			
Weight	2609	+ 135	= 2744	Weight	2524	+ 110	= 2634
	Curb	Occupant(s)	Cargo		Curb	Occupant(s)	Cargo
CDC	1 2 F D E W 1			CDC	0 9 L P E W 1		
PDOF	+ 10			PDOF	- 04		
Stiffness	9			Stiffness	2		

*Handwritten notes for Vehicle 1: a=239.3, b=61.0, g=463.2*  
*Handwritten notes for Vehicle 2: a=140, b=67, g=148*

## SCENE INFORMATION

Rest and Impact Positions [ ] No. Go To Damage Information [ ] Yes

VEHICLE 1		VEHICLE 2	
Rest Position	(4.5)	Rest Position	
X	5.5	X	12.2
Y	0.4	Y	5.4
PSI	77	PSI	-87.4
Impact Position		Impact Position	
X	4.4	X	5.0
Y	(-20) -22	Y	-14.5
PSI	05.4	PSI	-8.4
Slip Angle		Slip Angle	

## VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

VEHICLE 1		VEHICLE 2	
Skidding	[ ] No [ ] Yes	Skidding	[ ] No [ ] Yes
Skidding Stop Before Rest	[ ] No [ ] Yes	Skidding Stop Before Rest	[ ] No [ ] Yes
End-of-Skidding Position		End-of-Skidding Position	
X		X	
Y		Y	
PSI		PSI	
Curved Path	[ ] No [ ] Yes	Curved Path	[ ] No [ ] Yes
Point on Path		Point on Path	
X		X	
Y		Y	
Rotation Direction	[ ] None [ ] CW [ ] CCW	Rotation Direction	[ ] None [ ] CW [ ] CCW
Rotation > 360°	[ ] No [ ] Yes	Rotation > 360°	[ ] No [ ] Yes

## National Accident Sampling System—Crashworthiness Data System: CrashPC Program Summary

## FRICTION INFORMATION

Coefficient of Friction

. 26 . 65

Rolling Resistance Option

2

Vehicle 1 Rolling Resistance

LF \_\_\_\_\_

RF \_\_\_\_\_

LR \_\_\_\_\_

RR \_\_\_\_\_

Vehicle 2 Rolling Resistance

LF \_\_\_\_\_

RF \_\_\_\_\_

LR \_\_\_\_\_

RR \_\_\_\_\_

## TRAJECTORY INFORMATION

Trajectory Data ☐ No ☐ Yes**If No, Go To Damage Information**

Vehicle 1 Steer Angles

LF \_\_\_\_\_

RF \_\_\_\_\_

LR \_\_\_\_\_

RR \_\_\_\_\_

Vehicle 2 Steer Angles

LF \_\_\_\_\_

RF \_\_\_\_\_

LR \_\_\_\_\_

RR \_\_\_\_\_

Terrain Boundary ☐ No ☐ Yes

First Point

X \_\_\_\_\_

Y \_\_\_\_\_

Second Point

X \_\_\_\_\_

Y \_\_\_\_\_

Secondary Friction Coefficient

\_\_\_\_\_

## DAMAGE INFORMATION

VEHICLE 1

Damage Length

\_\_\_\_\_ 53 . \_\_\_\_\_

Crush Depths

C1 \_\_\_\_\_ 5 . 6C2 \_\_\_\_\_ 3 . 3 5C3 \_\_\_\_\_ 2 . 9C4 \_\_\_\_\_ 2 . 2C5 \_\_\_\_\_ 1 . 4C6 \_\_\_\_\_ 1 . 3

Damage Offset

± \_\_\_\_\_ 4 . 4 \_\_\_\_\_

VEHICLE 2

Damage Length

\_\_\_\_\_ . \_\_\_\_\_

Crush Depths

C1 \_\_\_\_\_

C2 \_\_\_\_\_

C3 \_\_\_\_\_

C4 \_\_\_\_\_

C5 \_\_\_\_\_

C6 \_\_\_\_\_

Damage Offset

± \_\_\_\_\_ . \_\_\_\_\_

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

S U M M A R Y      O F      E D C R A S H      R E S U L T S

Lic. User: NHTSA #7      S/N: 0266-7      Version: 4.61

Date:           -1995      AB22

# MESSAGES:

WARNING: The Damage-based DELTA-V(s) differ from the Momentum-based DELTA-V(s) by more than 10 percent. Review the Speed Changes displayed on the SUMMARY OF RESULTS.

If the user-entered scene data (particularly the angles at impact and the positions at impact and rest) are correct, then the user-entered PDOF's or Damage Data may be suspect. The difference may also be the result of bumper over-ride and the default or user-entered crush stiffness coefficients are too high. Review and adjust the damage data as required.

WARNING: The Damage-based estimates for damage energy grossly violate the conservation of energy. Review the output to determine the required corrections to the Damage Data or Scene Data.

The energy absorbed by damage (impact) should be approximately equal, whether calculated from Vehicle Damage or Damage & Scene Data. The results are shown below:

## Combined Crush Energy:

Damage Data	9911.2 ft-lb
Damage and Scene Data	11875.0 ft-lb
Linear Momentum	22435.9 ft-lb

## Damage-based Velocities:

Veh #1	18.8 mph
Veh #2	5.9 mph

WARNING: The separation velocity of the striking vehicle is greater than the separation velocity of the struck vehicle along a line between the vehicle CGs. This implies the striking vehicle is driving through the struck vehicle after impact.

The coefficient of restitution should be positive (this result is displayed in the RELATIVE VELOCITY DATA results which follow). This generally means the separation velocity of the striking vehicle should be less than the separation velocity of the struck vehicle. Check your entered rolling resistances and scene data to make the required modifications.

B22

-1995 Page 2

## IMPACT SPEED (TRAJECTORY AND CONSERVATION OF LINEAR MOMENTUM)

	TOTAL	FWD.	LAT.	SIDESLIP
VEH #1	21.8 mph	21.8 mph	0.0 mph	0.0 deg
VEH #2	5.2 mph	5.2 mph	0.0 mph	0.0 deg

## SPEED CHANGE (DAMAGE)

	TOTAL	FWD.	LAT.	PDOF
VEH #1	7.0 mph	-7.0 mph	-0.9 mph	7.3 deg
VEH #2	7.3 mph	-1.3 mph	7.2 mph	-79.7 deg

## SPEED CHANGE (LINEAR MOMENTUM)

	TOTAL	FWD.	LAT.	PDOF
VEH #1	10.1 mph	-10.0 mph	-1.0 mph	5.5 deg
VEH #2	10.5 mph	-1.5 mph	10.4 mph	-81.5 deg

## ENERGY DISSIPATED BY DAMAGE

VEH #1	5982.9 ft-lb
VEH #2	3928.4 ft-lb

## RELATIVE VELOCITY DATA

## SPEED ALONG LINE THRU CGS (LINEAR MOMENTUM)

VEH #1	21.6 mph
VEH #2	-0.3 mph

## SPEED ORTHOGONAL TO CG LINE (LINEAR MOMENTUM)

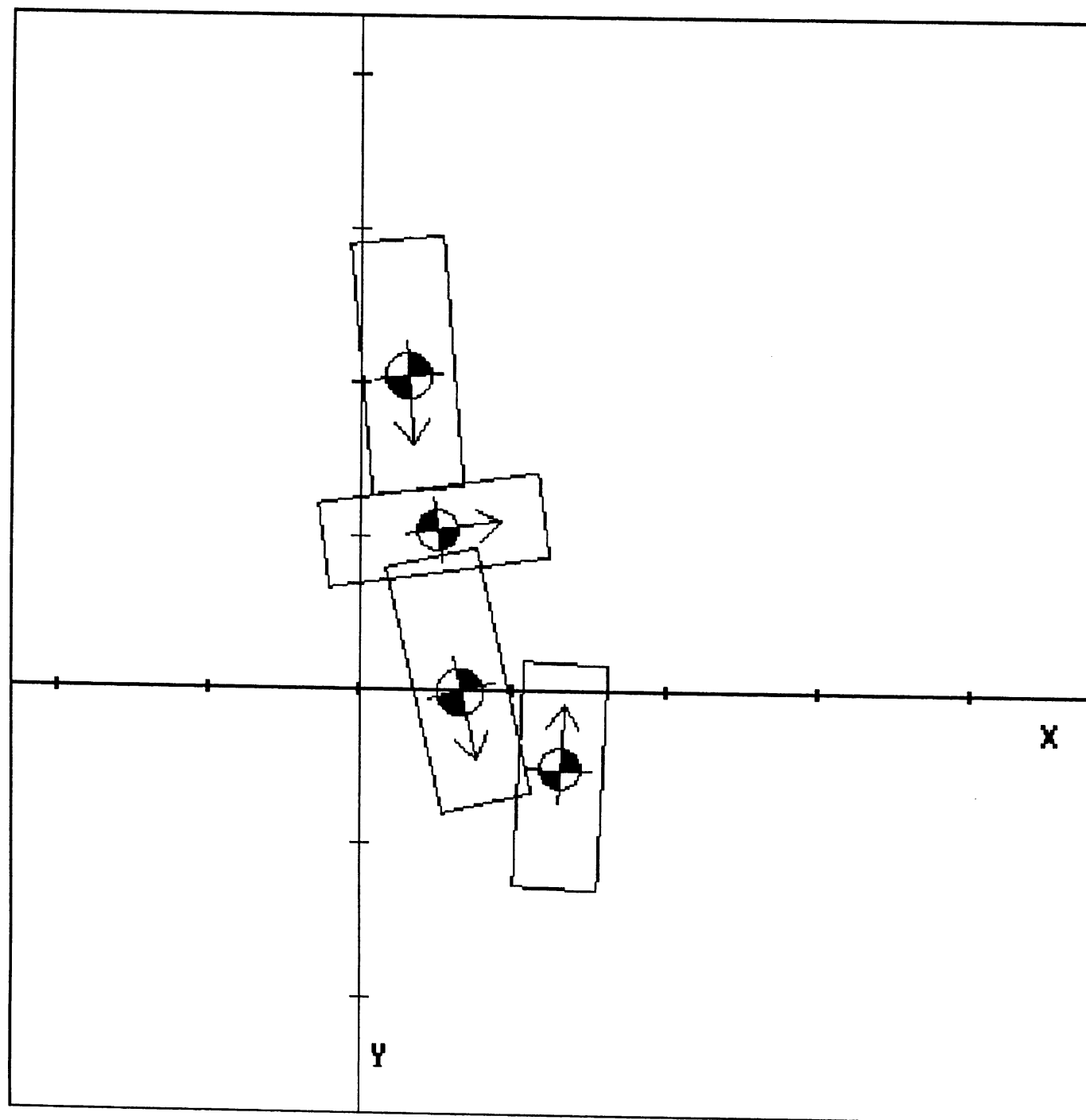
VEH #1	2.4 mph
VEH #2	5.2 mph

## CLOSING VELOCITY (LINEAR MOMENTUM)

21.3 mph

## COEFFICIENT OF RESTITUTION (LINEAR MOMENTUM)

-0.058



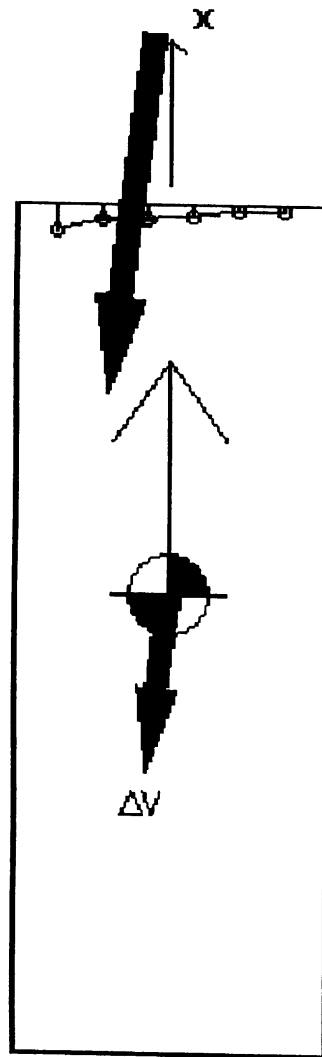
# **EDCRASH** Site Drawing

	Ueh #1	Ueh #2
<b>Impact</b>		
Speed	21.8	5.2
X	3.0	5.0
Y	-20.5	-10.5
Psi	85.0	-8.0
<b>Rest</b>		
X	6.5	13.0
Y	0.0	5.0
Psi	77.0	-87.0

**UNITS:** mph,ft,deg

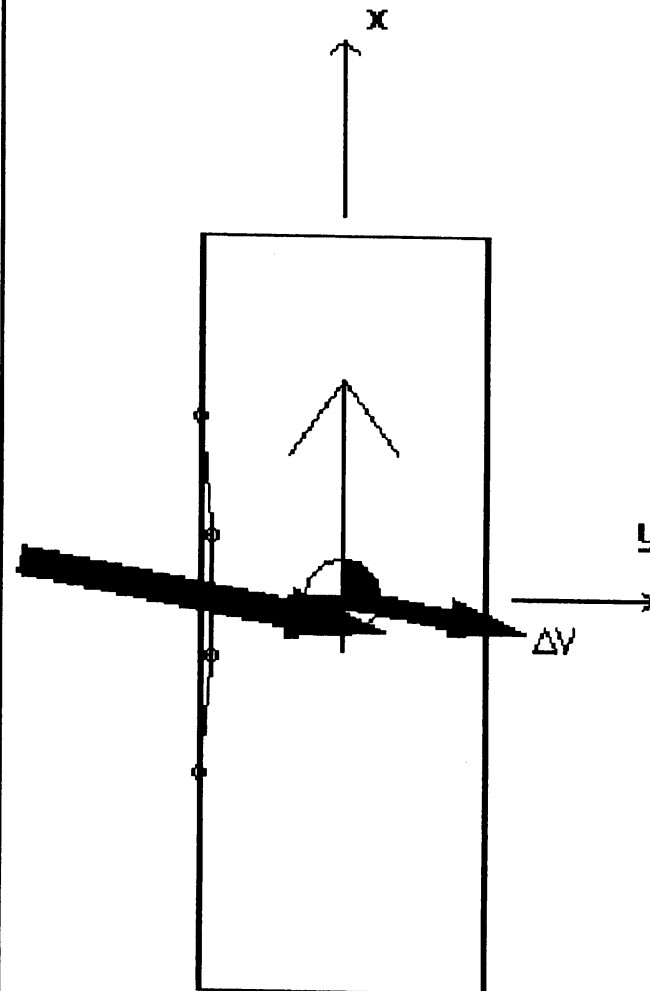
**Scale:** 10.0 ft/in

# Vehicle No. 1

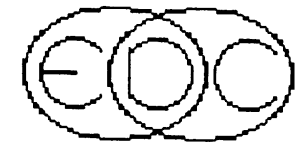


CDC/PDOF: 12fdew1 7.3 deg  
Max Impact Force: 21306 lb

# Vehicle No. 2



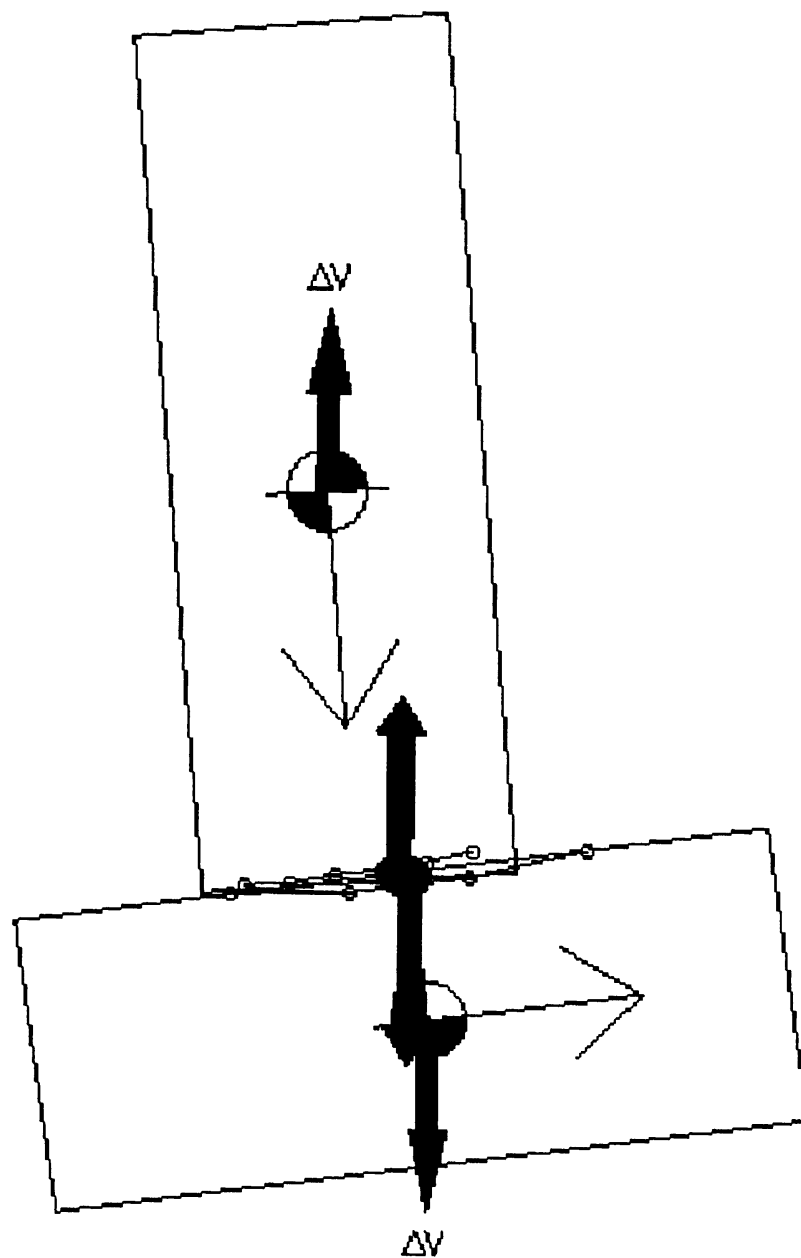
CDC/PDOF: 091pew1 -79.7 deg  
Max Impact Force: 22251 lb



## EDCRASH Damage Profiles

	Veh #1	Veh #2
Delta-U (mph):		
X	-7.0	-1.3
Y	-0.9	7.2
Tot	7.0	7.3

Crush Data (in):		
W	53.0	83.0
D	0.0	0.0
C1	5.6	0.0
C2	3.4	2.8
C3	2.9	2.8
C4	2.2	0.0
C5	1.0	
C6	1.3	



**EDCRASH**  
At Impact

	Ueh #1	Ueh #2
Velocities (mph)		
Tot	21.8	5.2
Fwd	21.8	5.2
Lat	0.0	0.0
Beta	0.0	0.0

Delta-V (mph)		
(BASIS: Momentum)		
X	-10.0	-1.5
Y	-1.0	10.4
Tot	10.1	10.5
PDOF	5.5	-81.5

UNITS: mph,ft,deg

# AIRBAG SUPPLEMENT

1

## ACCIDENT SUMMARY

1. Accident Date: WINTER / WEEKDAY
2. Police Investigated 1  
(1) Yes  
(2) No  
(3) Unknown  
  
Agency:  
City:  
County:
3. General Locality 2  
(1) Freeway, Limited Access  
(2) Urban (City)  
(3) Urban-Rural (mixed)  
(4) Rural, Fields
4. Configuration (First Harm) 4  
(0) Struck Object or Ped  
(1) Rear-End  
(2) Head-On  
(3) Rear-to-Rear  
(4) Angle  
(5) Sideswipe-Same Direction  
(6) Sideswipe-Opposite Dir.  
(7) Noncollision  
(8) Nonimpact Deployment  
(9) Unknown
5. Fire Involved φ  
(0) None  
(1) Airbag Vehicle  
(2) Other Vehicle  
(3) Both Vehicles  
(9) Unknown
6. Vehicles Involved 1
7. Persons Involved 1
8. Injured Persons 1
9. Maximum AIS in Accident 6
10. Date Vehicle Inspected:           94
11. Reason Vehicle Not Inspected 1  
(0) Not Required  
(1) Inspection Completed  
(2) Cannot be Located  
(3) Repaired or Destroyed  
(5) Refusal or Impounded  
(7) Other:
12. Impact Data Obtained 7  
(0) No Data Obtained  
(1) CDC Only  
(2) Crush Profile Only  
(3) Trajectory Data Only  
(4) CDC and Crush Profile  
(5) CDC and Trajectory  
(6) Crush and Trajectory  
(7) CDC, Crush, and Trajectory
13. Basis of Delta-V 2  
(0) Not Computed (Unknown why)  
(1) CRASH - Damage Only  
(2) CRASH - Damage + Traj  
(3) OLDMISS  
(4) POLES  
(5) Unknown Basis  
(6) One Vehicle Beyond Scope  
(7) Collision Beyond Scope  
(8) Insufficient Data

## VEHICLE HISTORY

14. Prior Impacts for AB Vehicle? 9  
(1) Yes  
(2) No  
(9) Unknown
15. Has Any Prior Maintenance or Service Been Performed on System 2  
(1) Yes  
(2) No  
(9) Unknown

Describe:

## AIRBAG VEHICLE

Fleet: NA

VIN: 1G1LT53T9NYXXX

## AIRBAG VEHICLE INSPECTION



## AIRBAG SUPPLEMENT

2

Mileage: 15901 KM (9881 MILES)

### SYSTEM READINESS LAMP

16. Pre-Impact Lamp Condition 1  
(1) Functioning/Proved Out  
(2) Inoperative  
(9) Unknown
17. Driver's Report of Pre-Impact Flashing 99  
(00) No Flashing Reported  
(01) Continuous Flashing  
(02) \_\_\_\_\_  
Number of Flashes: \_\_\_\_\_  
(11)  
(12) Constant Light  
(19) Flashing, Unknown Number  
(88) Not Applicable, System Removed  
(99) Unknown
18. Period of Pre-Impact Flashing 9  
(0) No Flashing  
(1) Same Day as Impact  
(2) Prior Day  
(3) Prior Two Days  
(4) Prior Week  
(5) Prior Month  
(6) Over One Month  
(9) Unknown
19. Post-Impact Lamp Condition 9  
(1) Functioning/Proved Out  
(2) Inoperative  
(9) Unknown
20. Post-Impact Flashing 99  
(00) No Flashing Reported  
(01) Continuous Flashing  
(02) \_\_\_\_\_  
Number of Flashes: \_\_\_\_\_  
(11)  
(12) Constant Light  
(19) Flashing, Unknown Number  
(88) Not Applicable, System Removed  
(99) Unknown
21. Airbag Vehicle First Harmful Event 13  
(01) Fire or explosion  
(02) Immersion  
(03) Gas Inhalation

- (04) Fell from vehicle  
(05) Injured in vehicle  
(06) Other noncollision (specify):  
(07) Overturn  
(08) Jackknife  
COLLISION WITH:  
(09) Pedestrian  
(10) Pedalcyclist  
(11) Railway train  
(12) Animal  
(13) Motor vehicle in transport  
(same roadway)  
(14) Motor vehicle in transport  
(other roadway)  
(15) Parked motor vehicle  
(16) Other type nonmotorist (specify):  
(17) Thrown or falling object  
(18) Boulder  
COLLISION WITH FIXED OBJECT  
(20) Building  
(21) Impact attenuator/crash cushion  
(22) Bridge pier or abutment  
(23) Bridge parapet end  
(24) Bridge rail  
(25) Guardrail  
(26) Concrete traffic barrier  
(27) Median barrier  
(28) Other longitudinal barrier (specify):  
(29) Highway/traffic sign post  
(30) Overhead sign support  
(31) Luminaire/light support  
(32) Utility pole  
(33) Other post, pole, or support  
(34) Culvert  
(35) Curb  
(36) Ditch  
(37) Embankment-earth  
(38) Embankment-rock, stone, or concrete  
(39) Fence  
(40) Wall  
(41) Fire hydrant  
(42) Shrubbery  
(43) Tree  
(44) Other fixed object (specify):  
(45) Pavement surface irregularity  
(99) Unknown

### AIRBAG VEHICLE IMPACT SUMMARY

22. Vehicle Role 1  
(0) Noncollision

## AIRBAG SUPPLEMENT

3

- (1) Striking unit  
(2) Struck unit  
(3) Both striking and struck  
(9) Unknown
23. Manner of Leaving Scene 2  
(1) Driven  
(2) Towed-due to damage  
(3) Towed-not for damage  
(4) Towed-details unknown  
(5) Abandoned  
(9) Unknown
24. Number of Impact Events 1  
(8) 8 or more  
(9) Unknown
25. Rollover φ  
(0) No rollover  
(1) First event  
(2) Subsequent event  
(3) Yes, Unknown event  
(9) Unknown
26. Override/Underride φ  
(0) No override/underride  
(1) Override - 1st CDC  
(2) Override - Other CDC  
(3) Underride - 1st CDC  
(4) Underride - Other CDC  
(9) Unknown

### AIRBAG VEHICLE DAMAGE

CODES: (1) Yes, damaged  
(2) No damage  
(9) Unknown

27. Left Front Fender Damage 1
28. Right Front Fender Damage 2
29. Center Top of Grille Damage 1

### FRONT BUMPER E.A. STATUS

30. Left 5

31. Right 5

- (1) Normal  
(2) Extended  
(3) Partial Compression  
(4) Complete Compression  
(5) Not Applicable  
(9) Unknown

### FIRST AIRBAG VEHICLE IMPACT:

32. Configuration 4  
(0) Struck Object or Ped  
(1) Rear-End  
(2) Head-On  
(3) Rear-to-Rear  
(4) Angle  
(5) Sideswipe-Same Direction  
(6) Sideswipe-Opposite Dir.  
(7) Noncollision  
(8) Nonimpact Deployment  
(9) Unknown

33. CDC:

34. Object Contacted:

### PRIMARY/DEPLOYMENT IMPACT:

35. Event Number 1
36. Total Delta-V 1 mph
37. Longitudinal Delta-V 1 mph
38. Configuration 4  
See 32 above for codes
39. CDC: 12 FDEW 1
40. Object Contacted: V2 1990 MITSUBISHI  
ECLIPSE 3-DR

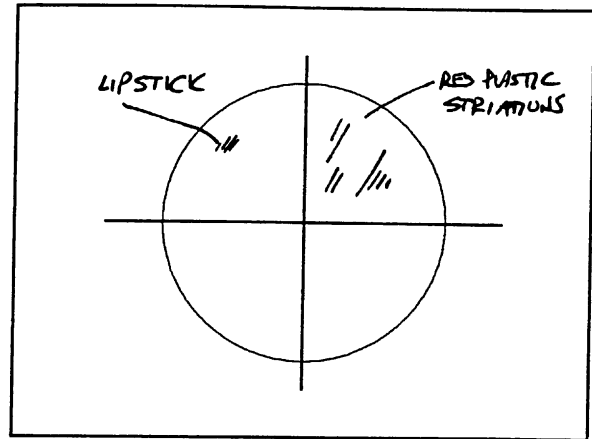
### AIRBAG SYSTEM DAMAGE

CODES: (1) Yes, Damaged  
(2) No, Intact  
(3) Not Applicable  
(9) Unknown

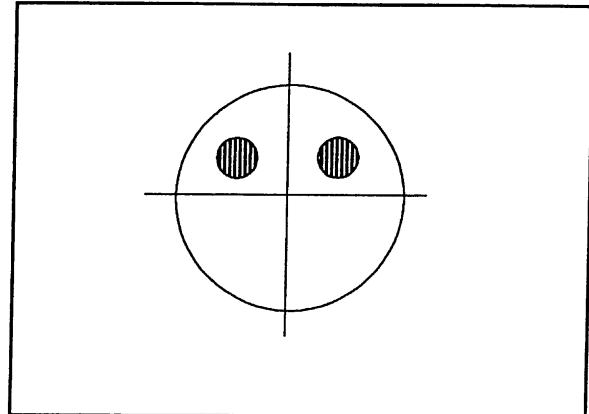
# AIRBAG SUPPLEMENT

4

- |   |  |
|---|--|
| 41. Airbag Module   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> |
| 42. Left Front Sensor   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 43. Center Front Sensor   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 44. Right Front Sensor  | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 45. Rear Cowl Sensor  | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 46. Diagnostic Module   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 47. Wiring  | <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> |
| 48. Knee Diverter   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> |
| 49. Indication of disconnected or loose electrical connectors   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> |
| 50. Condition of Deployed Bag   | <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> |
| (1) Bag intact<br>(2) Split or torn<br>(3) Cut by object in impact<br>(4) Cut after accident<br>(5) Other<br>(8) NA (not deployed)<br>(9) Unknown |  |



**BACK**



**DESCRIBE SYSTEM AND BAG DAMAGE:**

**NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:**

**FRONT**

**OCCUPANTS OF AIRBAG CAR**

# AIRBAG SUPPLEMENT

5

51. Number of Occupants in Vehicle

1

52. Number of Injured Persons

1

53. Maximum AIS in Airbag Vehicle

- (0) No Injury
- (1-6) AIS Severity
- (7) Injured, unknown severity
- (9) Unknown

6

## DRIVER

Age: 75

Sex: FEMALE

54. Number of Driver Injuries

12

55. Source of Best Injury Data

- (0) Not injured
- (1) Autopsy
- (2) Hospital Medical Records
- (3) Emergency Room only
- (4) Private physician, clinic
- (5) Lay Coroner Report
- (6) EMS Personnel
- (7) Interviewee
- (8) Police
- (9) Unknown

1

## MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
--------	---------	---------

Head/Neck/Face	<u>2</u>	<u>MODULE COVER</u>
----------------	----------	---------------------

# AIRBAG SUPPLEMENT

6

Chest	<u>6</u>	<u>AIRBAG MODULE</u>
Abdomen	<u>      </u>	<u>      </u>
Legs/Hips	<u>1</u>	<u>INSTRUMENT PANEL</u>
Other (Arms)	<u>      </u>	<u>      </u>
Driver Maximum	<u>6</u>	<u>AIRBAG MODULE</u>

## EJECTION

Extent: NA

Portal:

---

## OTHER VEHICLE:

Maximum AIS 0

Prime/Deploy Impact w AB Vehicle  
Event Number 1

CDC: 10 LPEW 2

Total Delta V 12 KPH / 7.3 MPH

Make: MITSUBISHI

Model Year: 90

Model: ECLIPSE

Body Type: 3-DC

## NOTES:

**DRIVER BELT USAGE:** (1) Used (2) Not Used (9) Unknown

1

Evidence:

**DRIVER POSTURE:** Any comments Recorded (1) Yes, (2) No

2

## F.A. FIC COLLISION REPORT

PAGE 1 OF 12

SPECIAL CONDITIONS		NUMBER INJURED 1	MT & RUN PELONY <input type="checkbox"/>	CITY	JUDICIAL DISTRICT	LOCAL REPORT NUMBER	
FATAL		NUMBER KILLED 1	MT & RUN REED <input type="checkbox"/>	COUNTY	REPORTING DISTRICT	SEAT	
COLLISION OCCURRED ON		MO. DAY YEAR		TIME (24HR)		NCIC #	OFFICER I.D.
MILEPOST INFORMATION		DAY OF WEEK SMTWTFSS		TOW AWAY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		PHOTOGRAPHS BY:	
<input checked="" type="checkbox"/> AT INTERSECTION WITH		STATE HWY REL. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> NONE			
<input type="checkbox"/> OR: FEET/MILES OF							
DRIVER'S LICENSE NUMBER		STATE	CLASS C	SAFETY EQUIP. J-C	VEH. YEAR 90	MAKE / MODEL / COLOR MITSU. ECLIPS. RED	LICENSE NUMBER
NAME (FIRST, MIDDLE, LAST)						STATE	
STREET ADDRESS		OWNER'S NAME		<input type="checkbox"/> SAME AS DRIVER			
CITY / STATE / ZIP		OWNER'S ADDRESS		<input type="checkbox"/> SAME AS DRIVER			
SEX F	HAIR BRN	EYES BRN	HEIGHT 5-3	WEIGHT 110	BIRTHDATE DAY MONTH YEAR 44	RACE W	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFFICER <input checked="" type="checkbox"/> DRIVER <input type="checkbox"/> OTHER
HOME PHONE		BUSINESS PHONE ( ) 20NK		PRIOR MECHANICAL DEFECTS: NONE APPARENT <input type="checkbox"/> REFER TO NARRATIVE <input type="checkbox"/>			
INSURANCE CARRIER		POLICY NUMBER		CHP USE ONLY VEHICLE TYPE		DESCRIBE VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input type="checkbox"/> MOD. <input checked="" type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL	
DIR. OF TRAVEL S/B		ON STREET OR HIGHWAY		SPEED LIMIT 25		PCF	
DRIVER'S LICENSE NUMBER		STATE	CLASS C	SAFETY EQUIP. L-G	VEH. YEAR 92	MAKE / MODEL / COLOR CHEV. CORSICA. RED	LICENSE NUMBER
NAME (FIRST, MIDDLE, LAST)						STATE	
STREET ADDRESS		OWNER'S NAME		<input checked="" type="checkbox"/> SAME AS DRIVER			
CITY / STATE / ZIP		OWNER'S ADDRESS		<input checked="" type="checkbox"/> SAME AS DRIVER			
SEX F	HAIR BLN	EYES BRN	HEIGHT 4-9	WEIGHT 135	BIRTHDATE DAY MONTH YEAR 20	RACE H	DISPOSITION OF VEHICLE ON ORDERS OF: <input checked="" type="checkbox"/> OFFICER <input type="checkbox"/> DRIVER <input type="checkbox"/> OTHER
HOME PHONE		BUSINESS PHONE ( ) -		PRIOR MECHANICAL DEFECTS: NONE APPARENT <input checked="" type="checkbox"/> REFER TO NARRATIVE <input type="checkbox"/>			
INSURANCE CARRIER		POLICY NUMBER		CHP USE ONLY VEHICLE TYPE		DESCRIBE VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input type="checkbox"/> MOD. <input checked="" type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL	
DIR. OF TRAVEL W/B		ON STREET OR HIGHWAY		SPEED LIMIT 50		PCF	
DRIVER'S LICENSE NUMBER		STATE	CLASS	SAFETY EQUIP.	VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER
NAME (FIRST, MIDDLE, LAST)						STATE	
STREET ADDRESS		OWNER'S NAME		<input type="checkbox"/> SAME AS DRIVER			
CITY / STATE / ZIP		OWNER'S ADDRESS		<input type="checkbox"/> SAME AS DRIVER			
SEX F	HAIR BLN	EYES BRN	HEIGHT 4-9	WEIGHT 135	BIRTHDATE DAY MONTH YEAR 20	RACE H	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFFICER <input type="checkbox"/> DRIVER <input type="checkbox"/> OTHER
HOME PHONE		BUSINESS PHONE ( ) -		PRIOR MECHANICAL DEFECTS: NONE APPARENT <input type="checkbox"/> REFER TO NARRATIVE <input type="checkbox"/>			
INSURANCE CARRIER		POLICY NUMBER		CHP USE ONLY VEHICLE TYPE		DESCRIBE VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input type="checkbox"/> MOD. <input checked="" type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL	
DIR. OF TRAVEL W/B		ON STREET OR HIGHWAY		SPEED LIMIT 50		PCF	
DRIVER'S LICENSE NUMBER		STATE	CLASS	SAFETY EQUIP.	VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER
NAME (FIRST, MIDDLE, LAST)						STATE	
STREET ADDRESS		OWNER'S NAME		<input type="checkbox"/> SAME AS DRIVER			
CITY / STATE / ZIP		OWNER'S ADDRESS		<input type="checkbox"/> SAME AS DRIVER			
SEX F	HAIR BLN	EYES BRN	HEIGHT 4-9	WEIGHT 135	BIRTHDATE DAY MONTH YEAR 20	RACE H	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFFICER <input type="checkbox"/> DRIVER <input type="checkbox"/> OTHER
HOME PHONE		BUSINESS PHONE ( ) -		PRIOR MECHANICAL DEFECTS: NONE APPARENT <input type="checkbox"/> REFER TO NARRATIVE <input type="checkbox"/>			
INSURANCE CARRIER		POLICY NUMBER		CHP USE ONLY VEHICLE TYPE		DESCRIBE VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input type="checkbox"/> MOD. <input checked="" type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL	
DIR. OF TRAVEL W/B		ON STREET OR HIGHWAY		SPEED LIMIT 50		PCF	
DRIVER'S LICENSE NUMBER		STATE	CLASS	SAFETY EQUIP.	VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER
NAME (FIRST, MIDDLE, LAST)						STATE	
STREET ADDRESS		OWNER'S NAME		<input type="checkbox"/> SAME AS DRIVER			
CITY / STATE / ZIP		OWNER'S ADDRESS		<input type="checkbox"/> SAME AS DRIVER			
SEX F	HAIR BLN	EYES BRN	HEIGHT 4-9	WEIGHT 135	BIRTHDATE DAY MONTH YEAR 20	RACE H	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFFICER <input type="checkbox"/> DRIVER <input type="checkbox"/> OTHER
HOME PHONE		BUSINESS PHONE ( ) -		PRIOR MECHANICAL DEFECTS: NONE APPARENT <input type="checkbox"/> REFER TO NARRATIVE <input type="checkbox"/>			
INSURANCE CARRIER		POLICY NUMBER		CHP USE ONLY VEHICLE TYPE		DESCRIBE VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input type="checkbox"/> MOD. <input checked="" type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL	
DIR. OF TRAVEL W/B		ON STREET OR HIGHWAY		SPEED LIMIT 50		PCF	
DRIVER'S LICENSE NUMBER		STATE	CLASS	SAFETY EQUIP.	VEH. YEAR	MAKE / MODEL / COLOR	LICENSE NUMBER
NAME (FIRST, MIDDLE, LAST)						STATE	
STREET ADDRESS		OWNER'S NAME		<input type="checkbox"/> SAME AS DRIVER			
CITY / STATE / ZIP		OWNER'S ADDRESS		<input type="checkbox"/> SAME AS DRIVER			

# TRAFFIC COLLISION CODING

STATE OF CALIFORNIA		PAGE 2	
DATE OF COLLISION	TIME (2400)	INCIDENT NUMBER	OFFICER I.D. NUMBER
DAY	YEAR	OWNER'S NAME / ADDRESS	
PROPERTY DAMAGE	DESCRIPTION OF DAMAGE		NOTIFIED <input type="checkbox"/> YES <input type="checkbox"/> NO

<b>SEATING POSITION</b> 	<b>OCCUPANTS</b> A - NONE IN VEHICLE B - UNKNOWN C - LAP BELT USED D - LAP BELT NOT USED E - SHOULDER HARNESS USED F - SHOULDER HARNESS NOT USED G - LAP / SHOULDER HARNESS USED H - LAP / SHOULDER HARNESS NOT USED J - PASSIVE RESTRAINT USED K - PASSIVE RESTRAINT NOT USED	<b>SAFETY EQUIPMENT</b> L - AIR BAG DEPLOYED M - AIR BAG NOT DEPLOYED N - OTHER P - NOT REQUIRED  <b>CHILD RESTRAINT</b> Q - IN VEHICLE USED R - IN VEHICLE NOT USED S - IN VEHICLE USE UNKNOWN T - IN VEHICLE IMPROPER USE U - NONE IN VEHICLE	<b>M/C BICYCLE - HELMET</b> DRIVER V - NO W - YES  PASSENGER X - NO Y - YES	<b>EJECTED FROM VEHICLE</b> 0 - NOT EJECTED 1 - FULLY EJECTED 2 - PARTIALLY EJECTED 3 - UNKNOWN
-----------------------------	--	--	--	---

ITEMS MARKED BELOW FOLLOWED BY AN ASTERISK (\*) SHOULD BE EXPLAINED IN THE NARRATIVE.

PRIMARY COLLISION FACTOR NUMBER (#) OF PARTY AT FAULT		TRAFFIC CONTROL DEVICES			TYPE OF VEHICLE			MOVEMENT PRECEDING COLLISION		
1	2	1	2	3	1	2	3	1	2	3
A VC SECTION VIOLATED: <input type="checkbox"/> CITED <input type="checkbox"/> YES <input type="checkbox"/> NO		A CONTROLS FUNCTIONING			A PASSENGER CAR / STATION WAGON			A STOPPED		
B OTHER IMPROPER DRIVING *		B CONTROLS NOT FUNCTIONING *			B PASSENGER CAR W / TRAILER			B PROCEEDING STRAIGHT		
C OTHER THAN DRIVER *		C CONTROLS OBSCURED			C MOTORCYCLE / SCOOTER			C RAN OFF ROAD		
D UNKNOWN *		D NO CONTROLS PRESENT / FACTOR *			D PICKUP OR PANEL TRUCK			D MAKING RIGHT TURN		
E FELL ASLEEP *		TYPE OF COLLISION			E PICKUP / PANEL TRUCK W / TRAILER			E MAKING LEFT TURN		
WEATHER ( MARK 1 TO 2 ITEMS )		A HEAD - ON			F TRUCK OR TRUCK TRACTOR			F MAKING U TURN		
A CLEAR		B SIDESWIPE			G TRUCK / TRUCK TRACTOR W / TRLR.			G BACKING		
B CLOUDY		C REAR END			H SCHOOL BUS			H SLOWING / STOPPING		
C RAINING		D BROADSIDE			I OTHER BUS			I PASSING OTHER VEHICLE		
D SNOWING		E HT OBJECT			J EMERGENCY VEHICLE			J CHANGING LANES		
E FOG / VISIBILITY FT.		F OVERTURNED			K HIGHWAY CONST. EQUIPMENT			K PARKING MANEUVER		
F OTHER *:		G VEHICLE / PEDESTRIAN			L BICYCLE			L ENTERING TRAFFIC		
G NO		H OTHER *:			M OTHER VEHICLE			M OTHER UNSAFE TURNING		
LIGHTING		MOTOR VEHICLE INVOLVED WITH			N PEDESTRIAN			N XING INTO OPPOSING LANE		
A DAYLIGHT		A NON-COLLISION			O MOPED			O PARKED		
B SK - DAWN		B PEDESTRIAN						P MERGING		
C RK - STREET LIGHTS		C OTHER MOTOR VEHICLE						Q TRAVELING WRONG WAY		
D DARK - NO STREET LIGHTS		D MOTOR VEHICLE ON OTHER ROADWAY			OTHER ASSOCIATED FACTOR(S) ( MARK 1 TO 2 ITEMS )			R OTHER *:		
E DARK - STREET LIGHTS NOT FUNCTIONING *		E PARKED MOTOR VEHICLE								
ROADWAY SURFACE		F TRAIN								
A DRY		G BICYCLE								
B WET		H ANIMAL:								
C DRY - ICY		I FIXED OBJECT:								
D SLIPPERY ( MUDDY, OILY, ETC. )		J OTHER OBJECT:								
ROADWAY CONDITION(S) ( MARK 1 TO 2 ITEMS )										
A HOLES, DEEP RUT *		PEDESTRIAN'S INVOLVED								
B LOOSE MATERIAL ON ROADWAY *		A NO PEDESTRIAN INVOLVED								
C OBSTRUCTION ON ROADWAY *		B CROSSING IN CROSSWALK AT INTERSECTION								
D CONSTRUCTION - REPAIR ZONE		C CROSSING IN CROSSWALK - NOT AT INTERSECTION								
E REDUCED ROADWAY WIDTH		D CROSSING - NOT IN CROSSWALK								
F FLOODED *		E IN ROAD - INCLUDES SHOULDER								
G OTHER *:		F NOT IN ROAD								
H UNUSUAL CONDITIONS		G APPROACHING / LEAVING SCHOOL BUS								
I UNUSUAL CONDITIONS										



MISCELLANEOUS

NAME OF COLLISION		TIME (24HR)	MISC NUMBER		OFFICER I.D.														
VICTIM TYPE	PASSENGER ONLY	AGE	SEX	EXTENT OF INJURY ( "X" ONE )				INJURED WAS ( "X" ONE )					PARTY NUMBER	SEAT POS.	SAFETY EQUIP.	EJECTED			
				FATAL INJURY	SEVERE INJURY	OTHER VISIBLE INJURY	COMPLAINT OF PAIN	DRIVER	PASS.	PED.	BICYCLIST	OTHER							
<input type="checkbox"/> * <input type="checkbox"/>	<input type="checkbox"/>	49	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1	J-C	0		
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: REFUSED TAKEN TO:

DESCRIBE INJURIES  
PAIN IN RIGHT HIP AREA

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/> * <input type="checkbox"/>	<input type="checkbox"/>	74	F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	1	K-G	0		
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO: HOSPITAL

DESCRIBE INJURIES  
CHEST TRAUMA, HEART ATTACK

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/> * <input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/> * <input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/> * <input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/> * <input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED		
REPORTER'S NAME	I.D. NUMBER	MO.	DAY	YEAR	REVIEWER'S NAME	MO.	DAY	YEAR									



## Narrative/Supplemental

Page 4

Date	Time	NCIC Code	By Mansell
(X) Narrative	(X) Collision report	( ) BA Update	(X) Fatal
( ) Supplemental	( ) other	( ) Haz Mat	( ) Bus
		( ) Hit Run	( ) Other

Location: \_\_\_\_\_ State Hwy. ( ) Yes (X) No

## SCENE

I RECEIVED THE CALL AT 1503 HRS AND RESPONDED FROM THE AREA OF  
 I ARRIVED AT THE LOCATION AT . UPON MY ARRIVAL I SAW THAT  
 THERE WAS ONE FEMALE SUBJECT (LATER IDENTIFIED AS P#2) ON THE STREET AND THAT  
 SHE WAS BEING GIVEN FULL CPR BY THE FIRE/PARAMEDICS. I SAW THAT VEHICLE #1  
 OF ----- WAS STOPPED FACING EASTBOUND IN THE #1 WESTBOUND LANE  
 AND THAT VEHICLE #2 ----- WAS  
 STOPPED FACING WESTBOUND PARTIALLY IN THE #2 LANE AND PART IN THE #1 LANE.

## DRIVERS STATEMENTS

PARTY #1: : SAID THAT SHE WAS SOUTHBOUND ON APPROACHING  
 SHE STOPPED AT THE STOP SIGN ON AFTER STOPPING  
 SHE LOOKED TO HER LEFT AND THEN TO HER RIGHT AND UPON SEEING NO CROSS TRAFFIC  
 SHE STARTED TO CROSS INTENDING TO GO EASTBOUND ON SHE SAID THAT  
 SHE DIDN'T SEE PARTY #2 UNTIL THE VEHICLE HIT HER CAR.

PARTY #1 TOLD ME THAT SHE WAS COMING FROM HOME AND WAS GOING TO A SUPERMARKET  
 ON ----- SHE WAS IN NO HURRY AND WAS FULLY ATTENTIVE TO HER  
 DRIVING. SHE SAID THAT SHE HAD SIX AND HALF HOURS OF SLEEP THAT MORNING GETTING  
 UP AT 6:30 AM. SHE HAS NO EXISTING MEDICAL CONDITIONS AND THAT SHE WAS TAKING  
 NO MEDICINES OF ANY KIND.

IN TALKING TO PARTY #1 SHE WAS FULLY ALERT AND WAS AWARE OF HER SURROUNDINGS. I  
 DID NOT NOTICE ANY SYMPTOMS OF ALCOHOL USE NOR ANY OTHER SYMPTOMS OF REDUCED  
 MENTAL STATE. SHE DID COMPLAIN OF A SORE RIGHT HIP WHICH SHE ATTRIBUTED TO  
 THE EMERGENCY BRAKE IN THE CENTER CONSOLE OF HER VEHICLE.

PARTY #2: NONE AS THE DRIVER WAS UNDER FULL CARDIAC ARREST.

APPROVED: \_\_\_\_\_

## 041 - 15 ONE LION

Page 3 (Rev. 7-87) OPI 042

88 4841

DATE OF INCIDENT / OCCURRENCE		TIME (2400)	NCIC NUMBER	OFFICER'S I.D. NUMBER
<input type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		<input type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER	TYPE SUPPLEMENTAL (IF APPLICABLE) <input type="checkbox"/> SA UPDATE <input type="checkbox"/> HAZARDOUS MATERIALS <input type="checkbox"/> FATAL <input type="checkbox"/> SCHOOL BUS <input type="checkbox"/> HIT & RUN UPDATE <input type="checkbox"/> OTHER	
CITY / COUNTY / JUDICIAL DISTRICT			REPORTING DISTRICT / BEAT	CITATION NUMBER
LOCATION / SUBJECT			STATE HIGHWAY RELATED <input type="checkbox"/> YES <input type="checkbox"/> NO	

1. LEGEND FOR T/C DIAGRAM

2.

3. A - BEGIN STATION LINE TELEPHONE POLE #

4. REFERENCE POINT ONE : 0.0 - 4'3" N/O S.L.

5.

6. B - END STATION LINE TELEPHONE POLE :

7. REFERENCE POINT TWO : 179'9" - 4'3" N/O S.L.

8.

9. C - RAISED CENTER DIVIDER WITH SHRUBBERY  
7'10" WIDE, 3'4" TALL, 11' IN LENGTH

10.

11. D - SHRUBS

12.

13. E - SIDEWALK 4' WIDE

14.

15. F - SIDEWALK 8' WIDE

16.

17. G - YUCCA TREE +36'10", 15' N/O S.L., 2' WIDE

18.

19. H - BRICK WALL 3'2" TALL

20.

21. I - STOP SIGN

22.

23. J - P2 VEHICLE

24. collision

25. R/R TIRE +93'10" 16' S/O S.L.

26. R/F TIRE +102'5" 18'3" S/O S.L.

27. L/R TIRE +92'6" 21'1" S/O S.L.

28. L/F TIRE +101'1" 23'6" S/O S.L.

29.

30. K - P1 VEHICLE

31. R/R TIRE +106'9", 28'7" S/O S.L.

32. R/F TIRE +98'5", 29'1" S/O S.L.

33. L/R TIRE +106'9", 23'3" S/O S.L.

34. L/F TIRE +99'0", 23'7" S/O S.L.

OFFICER'S NAME	I.D. NUMBER	MONTH / DAY / YEAR	REVIEWER'S NAME	MONTH / DAY / YEAR
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OVER →

TYPE OF INCIDENT / OCCURRENCE		TIME (2400)	INCIDENT NUMBER	OFFICER'S I.D.	NUMBER
TYPE OF ONE <input type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		TYPE OF ONE <input type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER:		TYPE SUPPLEMENTAL (IF APPLICABLE) <input type="checkbox"/> SA UPDATE <input type="checkbox"/> HAZARDOUS MATERIALS <input type="checkbox"/> FATAL <input type="checkbox"/> SCHOOL BUS <input type="checkbox"/> HIT & RUN UPDATE <input type="checkbox"/> OTHER:	

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COUNTY / JUDICIAL DISTRICT	REPORTING DISTRICT / BEAT	CITATION NUMBER
LOCATION / SUBJECT		STATE HIGHWAY RELATED <input type="checkbox"/> YES <input type="checkbox"/> NO

1. L- P1 VEHICLE R/R TIRE SCUFF MARK (UNDER P1 AND  
2. P2 VEHICLES).  
3. BEGIN SCUFF +91'0" , 15'3" S/O S.L.  
4. MID SCUFF +100'6" , 18'8" S/O S.L.  
5. END SCUFF +106'9" , 28'3" S/O S.L.  
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50.

DATE	FILE NUMBER	MONTH / DAY / YEAR	REVIEWER'S NAME	MONTH / DAY / YEAR
------	-------------	--------------------	-----------------	--------------------

## DATE OF COLLISION

40.

1499

**NRIC NUMBER**



NUMBER

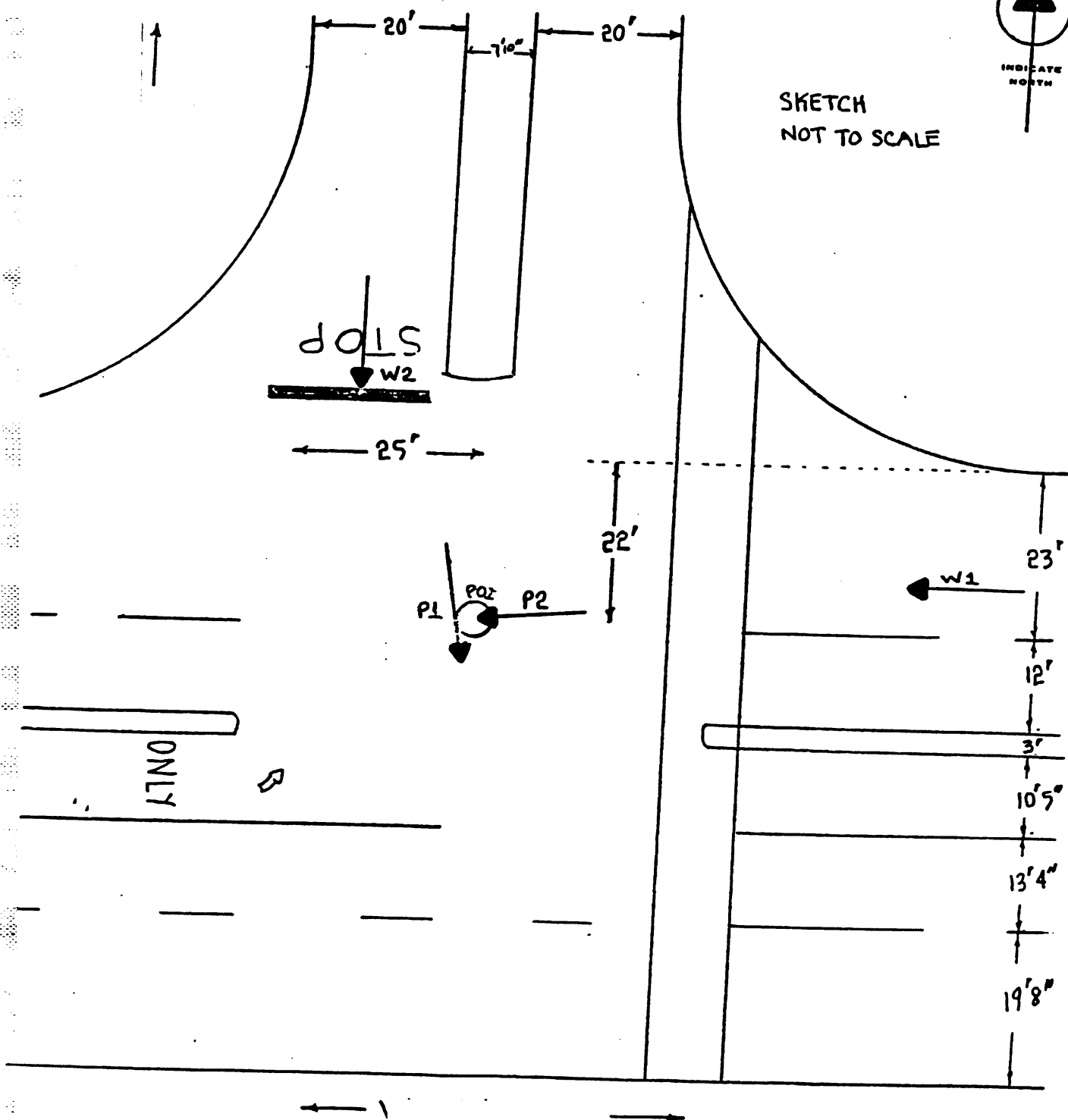
PAGE

4

ALL MEASUREMENTS ARE APPROXIMATE AND NOT TO SCALE UNLESS STATED (SCALE -



SKETCH  
NOT TO SCALE



ONLY

1 4 5 6 7 8 9

**I.D. NUMBER**

MO. DAY YR.

REVIEWER'S NAME

MO. DAY FR.

# FACTUAL DIAGRAM

PAGE 10

DATE OF COLLISION

3000

HEIR NUMBER

OFFI

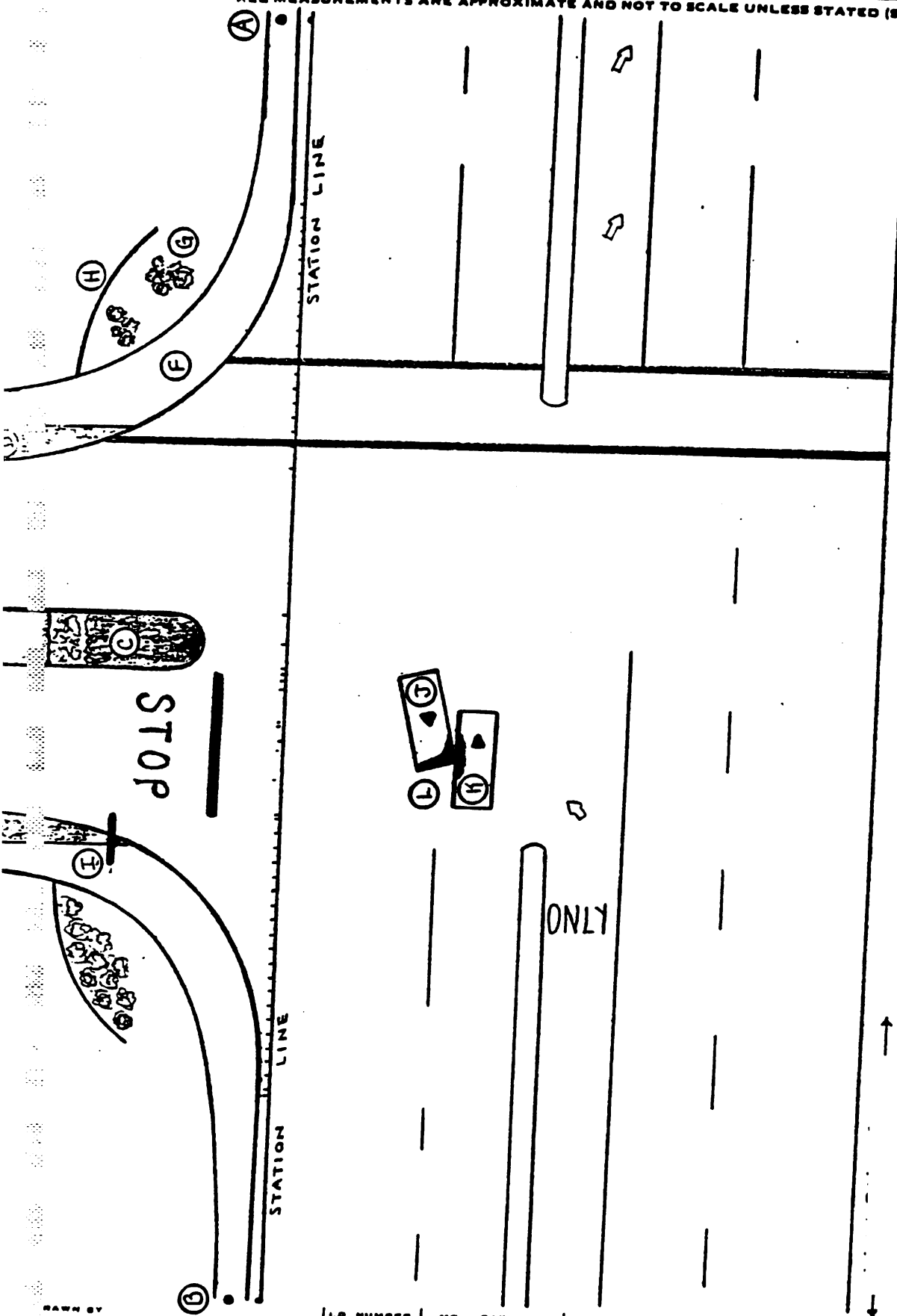
NUMBER

NO.

ALL MEASUREMENTS ARE APPROXIMATE AND NOT TO SCALE UNLESS STATED (SCALE -



INDICATE  
NORTH



DRAWN BY

I.D. NUMBER

NO.

DAY

VR.

REVIEWER'S NAME

NO. DAY VR.

## Narrative

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<input checked="" type="checkbox"/> Narrative	<input checked="" type="checkbox"/> Collision report	<input type="checkbox"/> BA Update	<input checked="" type="checkbox"/> Fatal
<input type="checkbox"/> Supplemental	<input type="checkbox"/> other	<input type="checkbox"/> Haz Mat	<input type="checkbox"/> Bus
		<input type="checkbox"/> Hit Run	<input type="checkbox"/> Other

State Hwy. ☐ Yes ☒ NoSCENE INVESTIGATION

## DESCRIPTION

This collision occurred on \_\_\_\_\_ which is an East-West highway which runs through most of the cities in the \_\_\_\_\_. It is heavily traveled during commuter hours. The center divider of the highway at the W/B lanes is the border of \_\_\_\_\_. It is located twenty-six miles East of \_\_\_\_\_. It is a predominantly residential community. The \_\_\_\_\_ runs East-West through the city. \_\_\_\_\_ is approximately four miles south of the \_\_\_\_\_ freeway. \_\_\_\_\_ is a four lane divided highway. There are raised concrete curbs with gutters and sidewalks on the North side of the highway which is the \_\_\_\_\_ side of the roadway. The South side of the roadway is bordered by a dirt shoulder and a railroad track approximately thirty feet from the south side of the highway. The location is approximately three miles West of the \_\_\_\_\_ (a State Hwy.) \_\_\_\_\_ is a truck route in both directions.

Upon arrival at the scene I saw that the ground was dry. There were two vehicles in contact with one another in the intersection. A red Mitsubishi Eclipse, \_\_\_\_\_ was stopped facing E/B in the number 1 W/B LOT. A red Chevrolet Corsica \_\_\_\_\_ was stopped facing S/W in the number 1 W/B LOT. There was some evidence of tire brush marks on the roadway surface but no evidence of applied brakes prior to impact. Examination of the Mitsubishi revealed that there was considerable damage to the left side of the vehicle. That vehicle is not equipped with an air bag. Vehicle 2, the red Chevrolet had extensive front end damage. It is equipped with a driver's side air bag which did deploy. There is evidence that the seat belt did lock in place and that there is present some disfigurement of the belt fabric (stretching) which would tend to indicate that it was worn at the time of a severe impact. Refer to photographs of the vehicles taken at the scene by \_\_\_\_\_

It also appears from the position of the front driver's side seat that the occupant drove the vehicle in a position very close to the steering wheel. The steering wheel is bent forward. There was little other evidence at the scene. See diagram and legend for measurements.



OPINIONS AND CONCLUSIONS

Party 2 ..... was W/B in the number 2 LOT of ..... approaching at approximately 45mph when P-1 (VILLA) who was stopped S/B on ..... began to make a left turn E/B onto ..... after stopping. P-1 had been stopped for several seconds while waiting for traffic to clear. P-1 failed to see P-2 in the oncoming car for an unknown reason. P-1 drove directly into the path of P-2. P-2 swerved slightly to the left crossing into the number 1 LOT but could not brake in time and struck P-2 broadside.

The impact caused the air bag on P-2's vehicle to deploy. Vehicle 2 did not sustain passenger compartment crushing. P-2 however did sustain internal injuries which resulted in her death. refer to "death report".

The ..... Coroner's office advised that the cause of P-2's death was a laceration to the heart. This might have been caused by the deployment of the air bag restraint in such close proximity to the driver who was seated very close to the steering wheel.

P-1 was in violation of ..... VC - Failure to Yield to through traffic when entering a through highway.

RECOMMENDATIONS

This case will be submitted to the District Attorney's office for review and consideration of filing charges of 192(c)(1)PC- Vehicular Manslaughter.

Submitted By

Date .. .

Reviewed by .. .

CORONER

## AUTOPSY RECORD

Name of Deceased:

Case No.

RESIDENCE:  
CITY:

STATE:

AGE: 75 years

SEX: Female

RACE: Hispanic

PLACE OF DEATH:

Hospital

ORIGINAL RECORDS OF PROSECUTOR  
DO NOT REPRODUCE

DATE OF DEATH:

TIME OF DEATH:

CAUSE OF DEATH:

Massive intrathoracic hemorrhage

Due to:

Laceration of heart and ascending aorta

Due to:

Blunt force trauma

OTHER COND.:

Severe coronary arteriosclerosis and atherosclerotic  
cardiovascular disease

AUTOPSY DATE:

AUTOPSY TIME:

PLACE OF AUTOPSY:

AUTOPSY ATTENDANCE:

Date D.C. ISSUED:

CLASSIFICATION: Traffic

Senior Pathologist Witness

Autopsy Surgeon

-CORONER

Official Records of the Coroner's Office  
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## AUTOPSY RECORD

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**IDENTIFICATION:** Seventy-five year old White female. Height, 59 inches. Weight, 128 lbs. Decomposition, absent. Unembalmed. Hair, gray. Rigor, present. Algor, refrigerated. Livor, minimal. Pallor, absent. Nutrition and muscular development, well. Color of the eyes, dark brown. Mouth, dentures on top, edentulous on bottom.

**EXTERNAL DESCRIPTION:** The body is that of an unembalmed, well developed, well nourished, White female exhibiting female breasts and genitalia. Coroner's tags are present on both big toes. The head appears to be normocephalic with the usual hair distribution. The facial features are unremarkable with no conjunctival hemorrhages. There is abrasion on both sides of the nostrils and brownish abrasion which is yellow, leathery, going from the anterior chin down to the base of the chin area. This is of brownish discoloration, probably because of drying artifact. There is a scar under the left subclavian area of about 2 inches in size, under which there is a pacemaker. Venipuncture needle marks are present, with iodine paint in the epigastric area. Venipuncture needle marks with bruising are on the right antecubital fossa, right wrist, and right inguinal area. An I.V. line with attached fluid bag and armboard is on the left antecubital fossa. There is an old healed surgical scar in the right upper quadrant of the abdomen, and another is in the right paramedian, lower abdomen. An old rectangular shaped scar, 4 x 4 inches in size, in the anterior left shin. A small abrasion is in the left kneecap and medial aspect of the left big toe. Examination of the hand also reveals the presence of a small 1 inch laceration and contusion on the dorsal aspect of the left hand. There is faded nail polish on the fingernails, and a small abrasion of the left forearm. The back is otherwise clear. There is an abrasion of the left side of the cheek area, also. Photographs of the injuries are taken.

**PRIMARY INCISION:** The body is opened by the usual Y-shaped incision and the anterior chest plate is removed. There is no fracture to the anterior ribcage; however, there is hemorrhage in the anterior chest wall muscle, which is the pectoral muscle, in the upper portion close to the sternoclavicular joint area. Both sides of the chest cavity are filled with a large amount of blood and blood clot. About 1600 cc's of blood and blood clot are removed from the right chest cavity, and about 600 cc's from the left pleural cavity. The pericardial sac has been lacerated on the right side. Photographs are taken. The abdominal organs are in their normal locations, and the serous surfaces appear to be smooth and glistening.

**CARDIOVASCULAR SYSTEM:** The heart weighs 370 grams. The pericardial sac is lacerated on the right side with laceration of the right atrium and right right atrial appendage. Photographs of the area are taken. The epicardial surface of the heart also shows laceration of about 2 cm. in size with contusion

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## AUTOPSY RECORD

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around it. There is also another hemorrhagic area noted in the apex of the heart in the adipose tissue. No direct laceration of the apex is identified. The left and right coronary arteries are in their normal locations with moderate to severe arteriosclerosis and segmental calcification on both sides. At places, the coronary arteries are about 60-70% occluded. The left and right sides of the heart are dilated and have no blood in the cardiac chambers. Blood collected for toxicology is from the right side of the chest cavity. There is contusion and laceration of the interventricular septum and a laceration of the right atrium, and also laceration of the right ventricle, close to the interventricular septum. There is also a laceration of the ascending aorta just above the aortic cusp area, probably leading to massive intrathoracic hemorrhage. Photographs of this are taken. The left ventricular wall is 1.5 cm. in thickness, the right is 0.3 cm. Section of the myocardium reveals a lacerated soft myocardium, especially in the interventricular septum area and the right ventricle. A minimal focal area of scarring is noted on both the interventricular septum and the anterolateral wall of the left ventricle, which appears to be intact. No recent myocardial infarction is seen. The cardiac valves show thickening with calcification of the aortic valve. The rest of the cardiac valves are unremarkable. There is laceration of the right atrial appendage, and the left is intact and unremarkable.

There is aneurysmal dilatation in two places, one in the mid-thoracic area and another in the lower abdominal aorta, before the bifurcation. No rupture of this aneurysm is seen. The rest of the abdominal and thoracic aorta has severe arteriosclerosis with mucosal ulceration and dystrophic calcification.

**RESPIRATORY SYSTEM:** The left lung weighs 260 grams, the right weighs 200 grams. Both lungs appear to be atelectatic, and are otherwise intact and unremarkable. The pleural surfaces have minimal anthracotic pigmentation. Section of the pulmonary artery is unremarkable, as are the major bronchi. Section of the lung parenchyma reveals atelectatic, congested lungs without any trauma, pneumonia or anomalies.

**NECK ORGANS:** Mucosa of the larynx, trachea and vocal cords are smooth and glistening, as is the mucosa of the pharynx and esophagus. The tongue shows tongue bites with hemorrhage in the tip of the tongue. Photographs of the area are taken. The soft tissues around the neck are unremarkable.

**DIAPHRAGM:** The diaphragm shows serous fibrous adhesions, and is otherwise unremarkable.

**LIVER:** The liver weighs 1470 grams. The capsular surface of the liver shows mild irregularity, and is otherwise unremarkable. The gallbladder is

Autopsy Surgeon

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## AUTOPSY RECORD

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Special Records and Reports  
San Francisco Police Department

surgically absent. The vessels in the porta hepatis appear to be unremarkable. Section of the liver parenchyma reveals firm, slightly nodular liver with smooth and glistening surfaces with no cirrhosis or fibrosis.

**PANCREAS:** The pancreas is normal in size revealing a normal acinar pattern. The pancreatic duct is patent, as is the bile duct, with no fat necrosis or hemorrhage.

**SPLEEN:** The spleen weighs 110 grams. The capsular surface of the spleen is smooth and glistening. The cut surface reveals a soft, congested spleen.

**ENDOCRINE SYSTEM:** Both lobes of the thyroid, the pituitary and the adrenals appear to be soft, congested and unremarkable.

**GENITOURINARY SYSTEM:** The left and right kidneys are 140 grams each. The capsules strip with ease. The cortical surfaces of both kidneys have marked irregularity, nodularity and scarring. The corticomedullary junctions are otherwise well demarcated, but thinned out. The pyramids are unremarkable. The mucosa of the calyces, pelves and ureters appear to be unremarkable. Both the ureters are patent. The urinary bladder contains no urine, and the mucosa is unremarkable. The uterus, cervix, both tubes and ovaries are surgically absent. The vagina vault is unremarkable.

**GASTROINTESTINAL SYSTEM:** The stomach has a small amount of solid, semisolid gastric contents. Mucosa of the stomach is smooth and glistening with no gastric ulcer, duodenal ulcer or esophageal varices. The mucosa of the small and large bowel is unremarkable. The appendix is surgically absent. There is no other lesion in the bowel.

**CENTRAL NERVOUS SYSTEM:** The scalp is reflected in the usual fashion with a few petechial hemorrhages on the inner aspect of the scalp. There is no trauma or fracture to the vault of the skull. Both the temporalis muscles are reflected with no contusion or laceration of the muscle. The calvarium is opened by the usual triple-notch incision. The dorsal surface of the brain is smooth and glistening with no evidence for epidural, subdural or subarachnoidal hemorrhage. The brain weighs 1120 grams. Both lobes of the cerebellum and cerebrum are symmetrical. The cerebral peduncles are midline. The vessels in the circle of Willis have mild arteriosclerosis.

Autopsy Surgeon

AUTOPSY RECORD

59/1281k

Official Record

Gray -

ST tell  
etch

Brown

9/11/68

Scar

Ab. nose

Ab. Base of chin  
+ and and ch.

Scar. C face works

vt e iodat

Brown exp

Scar

vt

9/11/68

@ 4000 Brown

vt

Faded  
navt

Dac

Ab.

earlow

vt

Scar

Scar R  
4 x 1/2"

M.D.

6

OFFICE OF THE CORONER

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REPORT OF TOXICOLOGICAL EXAMINATION

INVESTIGATOR:

CASE NUMBER

NAME OF DECEASED:

Medical Records of the Coroner

DO NOT REPRODUCE

AGE: 75

SEX: Female

SPECIMENS SUBMITTED: Postmortem Blood

BLOOD RECEIVED BY:

FROM:

Replicate samples of postmortem blood were analyzed for ethanol and other common volatiles employing a headspace gas chromatographic method. None were detected.

Samples of postmortem blood were screened for barbiturates, cocaine, methamphetamine, opiates, and related compounds by RIA. None were detected.

Certified to be a true copy of original report  
of the [redacted] Coroner's Office.  
[redacted] CORONER

Date typed: --

Toxicologist

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What follows is a medical consultant's interpretation of the mechanism of injuries on Case D91-94-AB-22, that of a 75-year-old female with the following injuries:

- 1) abrasions to the nares, chin and left cheek, and tongue laceration
- 2) contusion to the pectoralis muscle on the anterior chest wall
- 3) laceration to the right side of the pericardium
- 4) laceration of the ascending aorta
- 5) contusion to the epicardium and intra-ventricular septum
- 6) laceration of the heart in the right atrial appendage, right ventricle in proximity to the intra-ventricular septum, and the intra-ventricular septum
- 7) small laceration to the back of the left hand and an abrasion to the left upper inner arm.

It appears that this victim died rapidly from exsanguination from cardiac and aortic laceration. These injuries were likely of a compressive-rupture nature rather than a laceration from penetrating rib or sternal ends as there were no fractures to either ribs or sternum. The compression sustained by the aorta and heart could have been secondary to loading from the shoulder component of the belt system, the airbag and its casing, or from impact with the steering wheel hub, or all of the above.

The weight of evidence, I believe, favors a predominant role for the airbag and casing. There is no evidence of seatbelt contusion or abrasion of the skin, and the abrasions to the chin and face and nares are suggestive of contact with the airbag casing and expanding airbag, suggesting victim proximity to the detonating airbag complex. It is not possible to ascertain whether the thoracic injuries were the result of contact with the airbag module cover or the expanding airbag.

It is unlikely that the pacemaker contributed to her injuries, and while her coronary arteries were seen to be partially occluded, this is a normal finding in victims of this age



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Page Two

and not likely to make the heart muscle more susceptible to laceration from external compression.

The kinematics described in your technical report I believe adequately explain the injuries that this victim sustained.

If you have further questions, please don't hesitate to contact me.

Sincerely,